

THE
ECONOMIC JOURNAL
VOLUME XX



MACMILLAN AND CO., LIMITED

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TORONTO

THE
ECONOMIC JOURNAL

THE JOURNAL OF

The Royal Economic Society

EDITED BY
F. Y. EDGEWORTH

VOLUME XX

London
MACMILLAN AND CO., LIMITED
NEW YORK: THE MACMILLAN COMPANY

1910

**RICHARD CLAY AND SONS, LIMITED,
BREAD STREET HILL, E.C., AND
BUNGAY, SUFFOLK.**

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THE ECONOMIC JOURNAL

MARCH, 1910

THE NATURE AND CAUSES OF THE TAX REFORM MOVEMENT IN THE UNITED STATES.¹

IN all parts of the United States there are men busy with the reform of taxation. The "tax reform movement," in the sense in which that term is used in this address, is not concerned with federal taxation; it deals with state and local taxation only. This is because federal taxation is confined within very narrow limits by constitutional provisions intended to restrict the power of the federal government, and is, furthermore, dictated largely by the non-fiscal policy of protection. Consequently the main field in which an adjustment of taxation to changing economic conditions can be made is commonwealth and municipal finance.

An examination of the tax reform movement in the United States reveals, it seems to me, the action of many of the same forces and the influence of conditions similar to those which have led to new fiscal legislation, made and pending, in several countries in Europe, and notably in England. The forms of taxation are, of course, very different, the frame of government is different, the stage of economic development reached is different, but the nature and causes of the demand for a change in the methods and subjects of taxation are not dissimilar.²

The forces and conditions which have led to the tax reform movement in the United States are somewhat more easily apprehended than those which have given rise to analogous move-

¹ An abridgment of an Address delivered before the Royal Economic Society in London, November 10, 1909. The author is Professor of Finance in the University of California.

² This address deals with the American tax reform movement only. But if the assumption be correct that this is but the result of widely prevailing forces and conditions, the bearing that what is said may have on European legislation will be apparent without any direct effort to point it out.

ments in Europe. The reasons for this, briefly stated, are : first, the comparatively greater simplicity of property rights, such rights being less cumbered by historical remnants of different systems, and, especially, the absence of a tenant class ; second, the comparatively greater simplicity and uniformity of social conditions, and the absence of sharply sundered social classes, so that tax reform is not confused by class issues ; third, the more recent and more rapid growth of essential economic differences between different groups of citizens, it being but a scant half-century since that practical uniformity of economic well-being, from which our democratic form of government sprang, began to disappear ; fourth, the greater ease with which, under the prevailing system of representative government, changes can be made, or proposed, and experiments tried ; and, fifth, although this may seem paradoxical, the great ease with which tax-evading interests can entrench themselves against attack, both within the representative assemblies and behind the "sacred rights of property."¹

Contrary to the commonplace view, the tax reform movement in the United States does not arise from the necessity of raising additional revenue to meet the increased expenditure of government. There are few parts of the United States in which there is any serious difficulty in making ends meet in government housekeeping. This is especially true where the tax reform movement is most vigorous. The aim of that movement is to change the incidence of taxation, rather than to increase the revenues.

The vivifying causes of the tax reform movement in America are of two sorts. The first is the ethical or intellectual conviction, voiced in the writings, and, one may say, the preaching, of some of the most influential economists, that the present system of taxation has become, with the passage of time, unjust and unequal. This doctrinaire propaganda of tax reform has been very potent, and considering the great personal sacrifices that have been made for its sake has somewhat the aspect of a crusade.

But it is doubtful whether this teaching would have borne the fruit it has had it not been that the economic development simultaneously brought about changes which were inevitably bound to affect the tax system. This, then, is the second cause.

¹ The suggestion recently made by the noted economist Prof. A. T. Hadley, that possibly the time has come when the "sacred rights of property" should be modified in the interest of social well-being, has a very distinct bearing on the problem of taxation.

There grew up outside the existing tax system, or largely outside of it, great untaxed or undertaxed resources. These resources consisted either of new forms of wealth not covered by the old definitions of taxable property, or of masses of wealth held in new ways which lent themselves to tax evasion. These resources were for the most part in the hands of the great public service corporations, and of the so-called industrial trusts. Examples of these are furnished by the increased values of the properties, and more especially of the privileges, of railroads, street railroads, light, heat, and power companies, and the like; the increased earning power due to the economies of combination and monopoly in every form; and the increment in value of natural resources other than land, such as mineral deposits, water sources, reservoir sites, &c. In economic character this is closely analogous to the increment in land values. It is an unacknowledged merit of the much-abused general property tax that it automatically extends to cover the "unearned increment of land values" and equally automatically contracts to give relief for any undeserved detriment.¹ But the resources just described were not taxed in the same way. The effort to force them to pay taxes, together with the attempt to regulate the powers of the corporations owning them so as to lessen the danger of the antithesis between private advantage and social progress in well-being, have, to use the current phrase, "forced the corporations into politics." This has resulted in a very interesting change in American political life, the full significance of which is not yet apparent. The representative system by which the whole country is governed—the theory of which is one man one vote, and an equal number of voters for each representative—requires for its equitable working, substantial equality of economic well-being among the people. But with the growth of great inequalities in wealth, and especially with the growth of great aggregations of wealth entrusted by the many to the control of the few, this simple representative system undergoes a transformation. The success of those in control of great aggregations of wealth in obtaining more than their *per capita* representation, and even an undue voice, in government, is a subject for serious concern.² But whether for good or for ill, a change has come. Our government is no longer representative of individuals as units, nor of the geographical groups which

¹ Most of the states are forbidden by their constitutions to make any commutation of taxes. Such a commutation as that of the English land tax in 1798 is impossible.

² This address has, of course, nothing to do with the political corruption which has too often accompanied the transformation.

constitute the voting districts, but are representative of various economic groups. This is reflected in common terms: "the farmers' vote," "the labour vote," "the city vote," "the corporation influence," "the octopus," "the organisation," and others; none of which, in the last analysis, designate social classes, or political groups with party policies, but suggest, rather, more or less separable economic masses. They designate units of representation compounded, as it were, of men and their economic resources. There is nothing in this change necessarily surprising and nothing necessarily corrupting. Great economic resources are always a source of power and always have gained, and always will gain, recognition and political representation. That the effort will be made to use the political power, once it be won, to further increase the economic resources from which it draws its strength is also inevitable. Only the moral uprightness of the people will prevent abuses. The tax reform movement in this aspect is part and parcel of the great struggle to maintain an equitable balance between private advantage and the "greatest good of the greatest number." But to one in the midst of the contending forces it is apt to appear as the struggle of those who pay taxes under the old system to compel the holders of the new resources to bear part of the burden—a sordid battle of selfishness on each side, the only redeeming feature of which is the battle-cry, "equal taxation," furnished by the doctrinaires.

The tax reform movement in the United States is widespread and vigorous. Addresses, newspaper articles, magazine and journal articles, essays, books, reports, official and unofficial, all relating to taxation, are poured forth in a steady stream. Associations for promoting tax reform have been formed in many places, and national, or international,¹ conventions are being held annually. State legislatures are investigating, and many professional and ex-officio commissions have been appointed to aid them. In 1907 forty-one states and territories, out of the total of fifty-one, held legislative sessions, and all but two,² both of which have since done so, made changes in their laws relating to taxation. The following year the other ten states also amended their tax laws. That is, within a period of two years, practically every state and territory made some change, great or small, in its revenue system! The greater part of the changes and most of the proposals are conservative in character. But here and there radical suggestions come to the surface.³ Thus, to cite an extreme example, the new State of Oklahoma has started on its career

¹ I.e. including Canada.

² Rhode Island and South Carolina.

with a graduated income-tax of a highly inquisitorial character, a confiscatory tax on large land holdings, and an inheritance tax with rates so sharply progressive that they reach 100 per cent. at \$95,000, for strangers in the blood. It is safe to assume that these drastic measures will be short-lived. The kaleidoscopic character of the changes in this field of taxation makes it a fascinating, although a bewildering, study. The eighteen-month intervals between changes hardly suffice to read the new laws enacted by the fifty-one legislatures, and no one has ever succeeded in following the changes in the thousands of cities with more or less independent taxing powers.

Most of the evils in the tax system of the United States are found in the general property tax,¹ and the aim of the tax reform movement is to cure them in that tax. New taxes are not aimed at. The sole exception is the development of the inheritance tax.²

The general property tax is the largest single source of revenue and is universally regarded as *the tax* for all purposes. There is no state in the union in which it does not exist, at least as a tax for local purposes, although there are six states in which it is not used to supply revenue for state purposes. Without a single important exception, it is used in every city, in every town or its counterpart in local government, and in every school district, road district, or other kind of district. This tax was in its original conception a direct personal tax for local purposes, a means of apportioning neighbourhood charges among neighbours in proportion to their estates. It lost in part its local character when, after 1840, the states began to draw upon it by way of rates additional to the local rates. It gradually lost its personal character also. The term "property," as used in the tax laws, has lost, as nearly as can be, all relativity of meaning ;

¹ For the sake of brevity it is assumed that the reader is familiar with the framework of the American Government and with the existing tax system. Excellent descriptions of the government can be found in Fiske, *Civil Government in the United States*, and Bryce, *American Commonwealth*. An attempt to outline the tax system and to describe the three or four types of the General Property Tax will be found in the third edition of Plehn, *Introduction to Public Finance*, published in October, 1903 (the study of the types was not in the first nor in the second editions). For details concerning the Revenue Laws consult the present writer's contribution to the *Special Report of the United States Census Bureau on Wealth, Debt, and Taxation*, 1907 (pp. 617-828). For a detailed analysis of the receipts and expenditures of the different divisions of government, see the tables given in the *Special Census Report* just referred to. On municipal finance the Census Bureau publishes a report every two years.

² For a description of the rapid growth of this tax see Max West, *Inheritance Tax*, new edition, 1908, and the articles in the *Quarterly Journal of Economics*, by Huebner (August, 1904), and Millis (February, 1905).

it no longer necessarily implies an owner, and is very nearly synonymous with "substances" or "things." As it stands to-day, the general property tax is a tax on all the "property," irrespective of ownership, within the territory of the taxing authorities, except such as may be expressly exempted for reasons of public policy.¹

The tax reform movement deals separately with two phases of this tax—first, with its administrative shortcomings, and, second, with its substantive shortcomings.

On the administrative side the greatest difficulties have been : (1) to secure a uniform valuation of property in the different assessment districts ; (2) to obtain a uniform valuation of different classes of property ; (3) to ensure that all items of taxable property are entered on the tax rolls. The first has become serious, wherever the state taxes constitute a large proportion of the total levy. The remedy here applied has been central boards of apportionment, or, to use their legal name, "boards of equalisation." These are gradually developing into central boards of control, with power over the multitude of local assessors. They may in time deprive the local assessors of all discretionary powers. The second difficulty has been met by central boards of assessment or valuation for those classes of property which the petty local assessors find most hard to value (*e.g.*, railroads). The tendency is to merge this sort of a board with the first. The third difficulty, which is greatest in the South, has been overcome by so-called "back-tax commissioners," which have also a strong tendency to grow into boards of central control. To sum up, we may say that the tax reformers aim at central control to remedy the evils of the scattered and originally extremely localised administration.

There are two controlling reasons for this growth of central control. The first is the obvious fact that inequalities between districts become very seriously unjust when large state taxes are to be levied. The second is more closely connected with the substantive aims of tax reform. It really is an effort to bring new forms of property under taxation. The railroads afford the best of many possible illustrations, because their property lies scattered in many townships or tax districts. The local assessor may know all about the value of farm lands in his little town, and ought to know how much a hog, a cow, or a chicken is worth. But he can hardly be expected to know the value of six miles of railway track, part, perhaps, of a great transcontinental system. As he stands looking down the track, perspective brings

¹ For the exemptions see the Census volume above referred to.

the rails together in a vanishing point, and at that point, for him at least, the value vanishes also. Such properties can only be valued as a whole. The application of the so-called "unit rule" necessitates a central board. In most states this is an accomplished reform. But there is still much to be done; the principles of valuation are by no means clear.

On the substantive side, regarding the content of the tax, there are three elements to consider: (1) the *situs* of taxable property; (2) the *time* when the amount and value shall be taken; and (3) the *sorts* of property taxable. So far as real estate is concerned, the place concept presents no difficulty. But when it comes to personalty, especially of the intangible kinds, there is still much trouble, as no clear principles of inter-state or even of inter-district comity have been developed. Originally the tax laws followed the legal theory that personal property takes the *situs* of its owner's residence. This rendered evasion easy. To-day the general practice is to tax personal property wherever it may be found, irrespective of the residence of its owner. Moreover, it is now almost the universal practice to treat legal persons, corporations, as tax-payers, and to ignore the separate interests of the physical persons whose property is entrusted to the corporations.

The time element, the date to which the assessment refers, is usually fixed so as to work the practical exemption of the current products of land and of industry, and when not so fixed, these are expressly exempted by law. This strikingly illustrates the prevailing American conception that the property tax is based on estates or capital. That which is won by the sweat of the brow is held to be sacred from taxation until after saving has turned it into capital. This view is the reason why we have never had, and I believe we never will have, a complete direct income-tax, except as a war measure. The occasional doctrinaire advocacy of an income-tax finds little or no response in the breasts of American citizens.

As to property included, the usual definition is "all property, real and personal, in the state, not specifically exempt." Here the efforts of the tax reformers have been directed mainly to expanding the old accepted meaning of these terms, as crystallised and ossified in practice, so as to make them cover the new resources which have developed. Here the battle has been with the rigidity of customs and the conservatism of the courts.

The greatest practical difficulty is with the valuation of property. The criterion of value is almost always the selling

value, and rental values are rarely considered even in arriving at the selling value. It is safe to say that not 1 per cent. of the assessing officials is familiar with the concept that capital value depends upon annual value. There is practically no tenant class in the United States. Agricultural land is for the most part cultivated by its owners; a man is a tenant only temporarily, and always expects to become an owner. City lands are rarely rented, and the usual house lease is for one year, rarely over five years.¹ Lands change hands with great ease, and sales are frequent. Approximately how much land is worth per acre in the country, and how much per front foot or per square foot in the cities at purchase is everywhere a well-known fact. Considerable tracts of unused lands exist whose selling value is determined by prospective use. But the use of selling value, instead of rental value, introduces an element of uncertainty. A great deal must be left to the discretion of the assessor. Nothing like the certainty of Schedule A of the British property and income-tax can be achieved. Great as this difficulty is in the case of land, it is infinitely greater in other cases. One of these must serve as a sample.

As already stated, corporations are subject to the general property tax, and are to be treated as nearly as may be just as natural persons would be. But the great difficulty is to deal with that intangible increment of value not represented by an original money outlay for materials and labour. By straining the original meaning of the term property there has been created a class of taxable property most frequently called "the franchise," sometimes the "corporate excess," or often simply "intangible personal property." A single illustration will serve to make this conception clear and will rehearse at the same time a bit of tax reform history. In Michigan, years ago, railroads were taxed on the basis of gross earnings. The farmers, who had various grievances against the railroads, wanted to know whether the taxes so paid were "equal" to those paid on farm lands. A commission was appointed, which hired engineers, and after spending several hundred thousand dollars in making an inventory of the rails, ties, cuts, fills, bridges, cars, locomotives, and every other kind of physical property owned by the railroads, reported a value so low in relation to the known earning value of the roads as to be absurd. Then they called on Professor H. C. Adams, and he added together the market value of the stock, bonds, and

¹ The ground rent system in parts of Maryland, Delaware, and Pennsylvania and the share farms of the South and of the Far West afford the exceptions to prove the rule.

other securities representing the property, and, where he could not get the market value, capitalised the earnings. From the grand total thus obtained he deducted the value of the physical properties as previously ascertained by the engineers, and reported the difference as the value of the franchises. Then the farmers tried to make the roads pay taxes at the same rate as other property, on the total valuation.

The legal theory, developed with many a refinement in many battles in court, is that this "excess" is the value of a class of property called the franchise. The courts have defined franchises as "special privileges conferred by government on individuals and which do not belong to the citizens of a country by common right." They further define them as property and as taxable property. It will readily be seen that the value as ascertained by the method shown in the illustration covers not only the value of the special privileges but also large elements of economic rent, goodwill, and what the Germans so aptly indicate by the term, "*conjunctur. Gewinn*," together with the value of organisation (the value of a going concern), all rolled into one indistinguishable mass.

Among the three or four franchises, which according to the legal theory may vest in a great corporation, the most interesting are the "special" ones, so called because they must be exactly defined whenever conferred. The New York tax law describes some of them in language which recalls to mind the commandment concerning those things we may not worship: "All franchises, rights, authority or permission to construct, maintain, or operate the same" (referring to railroads, street railways, mains, pipes, or tanks for conducting steam, heat, water, oil, electricity, or any property or substance¹) "in, under, above, upon, or through any streets." These special franchises have often turned out to be very valuable, more so than was anticipated. To include them among the taxable property was a great triumph of the tax reform movement. But the battle is only half won. They do not always stay taxed, and, what is worse, although they grow more valuable from year to year, yet the increment of value does not show on the tax rolls. The demand of the tax reformers at present is that this class of property shall be assessed by men of bigger calibre than the average, petty, local assessor, and, whenever possible, by a mathematical rule which will allow the assessor very little discretionary power. One suggestion, for example, is that railroads

¹ Note that "property" and "substance" are coordinate terms.

and similar enterprises shall be taxed on gross earnings. Wisconsin has made a conspicuous success with a board of big men. Minnesota has both the big board and the mathematical rule, and is happy with the results. New York and Pennsylvania are doing well with the mathematical rule alone.

One of the favourite phrases of the tax reformers is, "separation of state from local taxation." This means that the state shall seek sources of revenue not drawn upon by the cities, towns, and other minor divisions. It is a reassertion of the old rule that surtaxes are bad. In states where the amount of state taxes levied is small compared with the total tax burden, separation can be accomplished by reserving for the state certain of the miscellaneous revenues, such as the inheritance tax, taxes on corporation charters, the commutation taxes in lieu of military service, some of the general license or permit fees, and a number of others.¹ The general property tax is there left entirely for the use of the minor civil divisions. In other states it involves taking away from the local divisions part of the general property tax—that is, depriving them of the right to tax certain classes of property. This plan can be illustrated by the proposal now before the voters of the State of California. In that state the inheritance tax and the taxes on insurance companies are already reserved exclusively for the state, which also receives part of the poll taxes. In addition thereto the state has been collecting about 50 cents per \$100 of assessed valuation on the general property tax. The total state and local tax rates average about \$1.50. About 1 per cent. of the true cash value of property is taken for taxes. Roughly speaking, the state takes one-third of the tax on property. It is now proposed that all the taxes on railroads, street railways, car companies, express companies, telegraph and telephone companies, light, heat, and power companies, and on banks, except the taxes levied on the real estate of banks and on the non-operative property of the other classes of corporations named, shall be exclusively for state purposes. The remainder of the general property tax is to be used for local purposes. The idea is that all property of a general character, not having a strictly local habitat, shall be taxed by the general government only, all localised property by the localities only. The first advantage claimed for this plan is that it abolishes the necessity for "equalisation" between districts, a source of constant irritation.² If there be no state tax to apportion, it is a matter

¹ Connecticut affords an excellent example. * See Census Report above cited.

² This irritation is so great that there is a movement to divide the state into two parts, all on account of dissatisfaction with the action of the State Board.

of indifference whether the assessment of property in different localities be equal or not. The second gain hoped for is that the classes of property selected for state taxation can be more fairly and adequately taxed. It will be easier to treat them uniformly, and to apply the "unit rule" when they are taxed by one authority than when they are taxed by fifty-nine counties, several hundred cities, and several thousand districts. Moreover, they can be taxed by methods not involving a valuation of property, as, for example, on gross earnings, at rates which will result in imposing a burden approximately equal to that which falls on other property. This is only one of the many ways in which "separation" can be worked out. Each state is working along different lines, each according to its own traditions and conditions.

Only one other phase of the tax reform movement remains. This deals with the apportionment of revenue between localities. There is a tendency for localities to claim an inalienable right to all the taxes on all the property within their boundaries. For example, cities claim the exclusive right to tax railroad terminals and thus bleed the rural districts. Sparsely populated local districts claim all the taxes on long stretches of railroads, and thus establish a sort of toll on passing commerce. A striking illustration of this is afforded by the rise of the great power plants, a growth of the last five years. Men have gone up into the uninhabited mountains and appropriated great watersheds and reservoir sites. There they have built dams, impounded the waters and turned their flow into electricity. Then they have strung wires in all directions, over hundreds of miles, forming great cobwebs over the country. Aside from the legitimate returns of their activities for the blessings they bring to town and country,¹ they have garnered great "increments of value," to which the term "unearned" may well be applied. So far they are taxed almost exclusively in the localities where the plants are located, and as these communities are small, the taxes are infinitely small in comparison with the resources of the companies. It is a question not merely of adequate taxation but of the apportionment of the tribute. The solution offered is that all these taxes should be collected by the central or state authority and apportioned on the basis of local needs.

Thus, as I see it, the tax reform movement is only one phase of social progress, a result, and in so far as it succeeds, a most potent cause, of great economic changes. No law changing the

¹ They even gave the farmer's wife the drudgery of churning. See *U. S. Census Bureau Reports on Electrical Industries*.

tax system can be called a mere "money bill" in the sense of having a fiscal bearing only. It is a movement hard to guide because of the clashing of interests and the jealousies of localities. The latter alone has defeated many a fine scheme, and the former often distorts the accomplished results. But the greatest handicap under which the tax reformer suffers is the lack of guiding principles in that part of the science of public finance which relates to incidence. We have nothing clear and simple to answer the voter's insistent question, "How will this change affect my interests?" To be sure, this is in no small part due to the shifting character of the conditions with which we deal. No sooner have we solved, at least to our own satisfaction, the incidence of a certain set of taxes than the conditions change and the burden slides on to other shoulders.

In conclusion, then, this address has one object besides the mere narration of events which I hope have been interesting, and that is to make a plea that economists shall devote more attention to the study of the incidence of taxation, and to the formulation of clear and simple statements of its principles.

CARL C. PLEHN

THE ASSESSMENT OF WEEKLY AND MONTHLY TENANCIES FOR LOCAL TAXATION.

THE following may seem to refer more especially to the assessment of property within the metropolitan area where statutory maximum deductions are in force, but there is no reason why it should not, *mutatis mutandis*, be equally applicable everywhere. Scales for the assessment of weekly and monthly tenancies are very frequently constructed in a most haphazard manner, and without any regard to the universally recognised principles of valuation for rating. It is therefore proposed to show how scales may be framed with the least possible amount of trouble for which it may, at the same time, be claimed that they are based on correct principles. Hitherto it has been necessary to resort to the method of trial and error in order to find the correct gross and rateable values of such properties. This, especially where "extra upkeep" had to be taken into consideration, was a very difficult and cumbrous method; but its use is completely obviated by the formulæ and tables hereafter given.

The two propositions formulated below may be regarded as axiomatic when any class of weekly or monthly tenancy is under consideration. It will be observed that the second one is equivalent to saying that the rateable value per shilling of rent should gradually increase as the rent rises.

(1) In the vast majority of cases the annual rent which a tenant might reasonably be expected to pay for premises held, say, on a weekly tenancy, is not the sum of fifty-two weekly rents, but a somewhat lower figure.

(2) Both the deduction for maintenance and the contingency balance should be greatest in the case of the lowest rented houses, and should be gradually lessened as the rental values rise, except in the case of tenement houses—*i.e.*, old houses let in separate floors or rooms.

In *Smith v. Churchwardens of Birmingham* (22. Q.B.D. 211,703), the Recorder of Birmingham found as a question of

fact that the premises could reasonably be expected to let from year to year at an amount equivalent to the sum of the weekly rents actually obtained. This being a question of fact only—although a most unusual one—the Court of Appeal declined to interfere with it, and held that no deduction should be made from the aggregate of the weekly rents in respect of “voids and losses” (*i.e.*, rent not paid whilst the premises were empty, or rent not recoverable from the tenant), or for the expense of collection; thus merely affirming the principle that “the test is not what the landlord actually receives, but what the tenant may reasonably be expected to give.” The difference will probably vary not only in different rating areas, but even in the same area; and it will also vary with the class of property, so that no fixed proportion would apply to every case.

Where a house, built to be let by the year to one tenant, becomes through lapse of time, or altered circumstances, subdivided into tenements, the gross rent is always considerably more than the letting value of the tenement as an undivided whole. This increase is, of course, largely due to the greater cost of repairs (which should be allowed for as between gross and rateable values), collection, and legal expenses (neither of which may be allowed). As a rule, however, the landlord would not care to let, nor would the tenant care to take the premises on anything longer than a weekly or monthly tenancy. A short tenancy ensures to the owner better control over the tenement, more punctual payment of rents, and less risk of vacancies; whilst its advantage to the tenant lies in the fact that his tenure is sufficiently secure, whilst he can, should he so desire, change his residence at short notice to suit his work, &c. The matter may perhaps be summed up thus: The owner demands a higher rent because he has to bear increased costs of collection, and, occasionally, legal charges—these are landlord's expenses, and cannot be allowed—but the tenant is willing to pay so much the more rent because he wishes to be able to leave when he chooses. Hence perhaps the landlord's collection and legal expenses may, generally speaking, be taken as the measure of the advantage, from the tenant's point of view, of a weekly or monthly over a yearly tenancy, and conversely, therefore, as the deduction to be made from the sum of the weekly or monthly rents to arrive at the gross yearly rent. This deduction, together with the sum required to produce the even pound, ten shillings, or whatever the unit of assessment may be, constitutes what is known as the “contingency balance.”

The second proposition we have laid down is equivalent to saying that the rateable value per shilling of rent should be lowest in the case of the smallest houses and increase gradually along (but not *pari passu*) with the rental value. The correctness of this general proposition is obvious; since not only will the cost of repairs, as a rule, decrease as the rent increases, but the legal expenses and the cost of collection will also, generally speaking, show a decline. Nevertheless, many assessment scales—even where the unit of assessment is as low as 5s.—show an utter disregard for this elementary principle—generally in the direction of inflicting hardship on the owners of the lowest-rented properties. It is, of course, obvious that the higher the unit of assessment, the more difficult it is to construct a scale which will be equitable to the owners of all classes of weekly and monthly properties, and a certain amount of disregard for the above principle is unavoidable when the unit is made 10s. instead of the 5s. or even less, still frequently used in some districts. Where no fraction of £1 appears in the valuation lists, as in London, it is practically impossible to construct a scale which will be fair to everyone concerned; but, on the other hand, it is necessary to remember that, the higher the unit adopted, the less the clerical labour involved. When all the circumstances are considered, it is probable that the 10s. unit is the most suitable for cities and large towns. If the unit in country districts be fixed at 5s., the actual contingency balance obtained in a properly constructed scale will approximate very closely to the contingency balance aimed at. The gross rent of any weekly or monthly tenancy usually includes items outside the definition [Valuation (Metropolis) Act, 1869, section 4] of gross value, and, on the other hand, it sometimes excludes an item which, according to the decision in *Pullen v. St. Saviour's Union* ([1900] 1 Q.B. 138), should be included. The items outside the definition are:

(a) *Rates*.—The full rates which would be payable by the tenant, and not the net amount paid under a compounding arrangement by the landlord, should be deducted (*Reg. v. Dodd* (1865) L.R. 1 Q.B. 16), and they should be calculated on the rateable value, not on the rent received (*Tyne Improvement Commissioners v. Chirton* (1862) 32 L.J.M.C. 192). Rates include fishery rate, (*Reg. v. Smith* (1885) 55 L.J.M.C. 49), sewers rate, (*Reg. v. Hall Dare* (1864) 34 L.J.M.C. 17), and any other special rate.

(b) *Water Rate*.—This is, strictly speaking, not a rate at all, but may be compared to a charge for gas or any other neces-

sary of life, and it is not rent in any sense (Smith v. Churchwardens of Birmingham, 1888). The question was before the Court as to whether the gross or the net charge was deductible, but it was not definitely decided.

(c) *Taxes*.—The land tax and the landlord's property tax are not included in these (Reg. v. Goodchild (1858) 27 L.J.M.C. 233), but inhabited house duty is. This tax is payable on houses of £20, and not exceeding £40 gross value, at the rate of 3d. in the £ on the *gross* value; over £40 and not exceeding £60 gross value at 6d. in the £; and over £60 gross value at 9d. in the £. It was held by the Court of Appeal that a block of dwellings should be assessed for inhabited house duty as one house (Attorney-General v. Mutual Tontine Westminster Chambers' Association (1876) 1 Ex.D. 469). The Board of Inland Revenue, however, as an act of grace, do not follow this decision strictly in the case of artisans' dwellings, but permit each self-contained tenement to be considered as a separate inhabited house (Report of Commissioners of Inland Revenue, 1886-87, p. 29, but see Customs and Inland Revenue Act, 1903, section 11). In the case of non-residential properties let on weekly or monthly tenancies, no deduction for inhabited house duty should, strictly speaking, be made, but as the duty in such instances, were the property residential, would generally be very trifling, the same assessment scales may usually be employed.

In Pullen v. St. Saviour's Union, the Court of Queen's Bench decided that, in order to arrive at the *gross value*, the cost of caretaker, dust removal, and watching, lighting, and cleaning the stairs and yard, must be added to the rent reserved; since this is "a sum which must be taken into consideration in arriving at the rent which a tenant might reasonably be expected to pay" for one of these tenements, the expenses forming part of those required to maintain the hereditament in a state to command the rent.

These expenses are sometimes met by a special charge per tenement per week in addition to the rent proper. Therefore, in assessing tenement houses, or artisans' dwellings, where the landlord undertakes the above-mentioned charges, it is necessary to add the special charge made for the performance of these functions to the gross rent proper, in order to arrive at the effective gross rent, and it is equally necessary to deduct the cost of performing the above services from the gross, to obtain the rateable value.

Residential hereditaments let at weekly or monthly rents may be divided into the following classes:—

Class (A) Houses constructed for, and occupied by, one tenant.

Class (B) Houses constructed for occupation by one tenant, but sublet in either floors or rooms. This class we shall designate as "Tenement Houses."

Class (C) The house or block of residences constructed for occupation in separate tenements (*i.e.*, artisans' dwellings).

CLASS "A."

Table "A" has been constructed, by means of the following formulæ, for the assessment of such properties:—

$$G = \frac{nR(1-c)}{n + \frac{t}{20}}, \text{ and } V = \frac{R(1-c)}{n + \frac{t}{20}} \text{ where } n = \frac{1}{1-m},$$

where V = rateable value,

and G = gross value, or gross estimated rental,

„ R = gross rent,

„ c = contingency balance aimed at, expressed as a fraction of the gross rent,

„ m = deduction for maintenance, expressed as a fraction of the gross value or gross estimated rental,

„ t = total poundage of rates on *rateable* value in shillings and fractions of a shilling (including both water-rate and inhabited house duty, expressed as poundage rates on the *rateable* value).

In order to turn inhabited house duty (which is leviable on the gross value) into the equivalent poundage rate on the rateable value, it is only necessary to multiply the poundage rate on the gross value by the value of " n ."

If " c " and " m " are taken as percentages of the gross rent and gross value respectively, instead of as fractions, the above formulæ become

$$G = \frac{nR(100-c)}{5(t + 20n)}, \text{ and } V = \frac{R(100-c)}{5(t + 20n)}, \text{ where } n = \frac{100}{100-m}.$$

Mathematically correct results are obtained by these simple formulæ; and, with their aid, tables may be constructed, with the least possible expenditure of time and labour, for any values

of the total poundage rate, contingency balance, and deduction for maintenance. Such tables should be computed in the first instance to the nearest shilling; then from these, suitable working tables may be quickly framed by adopting either five shillings, ten shillings, or one pound as the unit of assessment.

CLASS "B."

When a house constructed for a single occupier is sub-let in floors or rooms, the landlord, as we have already said, invariably obtains a higher rent than if it were let for the occupation of one tenant only. Such houses are always assessed in one of the three following ways:

(1) The rents of the individual lettings are added together, and the assessment based on the total.

This method is frequently adopted on account of its simplicity, but unless a deduction is made with the object of converting the sum of these tenemental rents into a figure which might fairly be supposed to represent the letting value of the house as if let to a single occupier, it produces a higher assessment than that laid down by statute. The reason for this is obvious; for it is an incontrovertible fact that the more tenants there are in a house the more will the total rent of that house exceed, in practically every instance, its letting value to a single tenant. It is this fact which, acting as a counterbalancing force to the principle that the contingency balance should be decreased as the rent of the tenement increases, has caused us to allow the same contingency balance throughout Table "B," which is intended for the assessment of tenement houses.

When the gross value of such premises, arrived at by the above method, exceeds £20, the injustice of not reducing the sum of the rentals of the various tenements to the amount at which the premises would let to a single tenant becomes more glaring, because the owner has then to pay inhabited house duty, and is deprived of all compounding benefits.

Looking at the question from the economic point of view (*i.e.*, the bad sanitary condition and unwholesome surroundings of such properties), it may perhaps be said that the owners of these premises deserve to bear a heavier burden of taxation than the statute imposes on them. However, so long as the law relating to the assessment of these houses remains unchanged, we cannot admit that the above argument ought to carry undue weight with rating authorities.

(2) The letting value of the house as if let to a single tenant

is taken as the basis of assessment of the house as one undivided entity. . .

This is undoubtedly the right method wherever the front door and passages are within the landlord's control, and the tenants use certain parts of the premises in common. It is very difficult, however, to draw the line, in some instances, between these cases and those in which the landlord exercises partial control.

(3) The rental value of each letting as the basis of assessment of each tenement, considered as a separate rateable hereditament.

This last method is unquestionably the proper one in those cases where the landlord does not retain any control of the outer door, and does not occupy any part of the premises himself, or in the person of his servant. Hitherto "tenement houses" have been but seldom assessed in this way; but, in the recent case of *Davis* (on behalf of the Islington Borough Council) *v.* *Wallis*, it was laid down by the Divisional Court that this method should be adopted. This decision has, however, since been reversed by the Court of Appeal (*White and Hales v. Mayor of Islington*). It is, of course, clear that, if each letting is ever to be assessed as a separate hereditament, such a property should be valued by the scale (Table "C") prepared for the assessment of artisans' dwellings, and not treated as Class "B" properties, for Table "B" assumes that the letting value to a single tenant is the proper basis of assessment for "tenement houses."

Premises coming under the category of Class "B" require, in order to arrive at equitable results, a larger contingency balance than those comprised in Classes "A" or "C." It is exceedingly difficult to obtain satisfactory instances where precisely similar properties of this kind are let at weekly and yearly rents respectively, and no definite conclusions can be formulated from the instances which are available. It therefore becomes necessary to reduce the sum of the actual rents of the tenements by a certain amount in order to arrive at the fair letting value to a single tenant. This deduction, in the case of tenement houses, should clearly be considerably greater than that made as contingency balance in the case of small self-contained houses let on short tenancies. Again, in dealing with tenement houses, the decision in *Pullen v. St. Saviour's Union* must be remembered. We shall designate as "extra upkeep" the expenses referred to in that decision as coming under those "necessary to maintain the hereditament in a state to command the rent." Further, the footnote to the Third Schedule of the Valuation (Metropolis) Act of 1869 states that "the maximum scale of

deductions shall not apply to houses or buildings let out in separate tenements." Hence, in dealing with "tenement houses," the deduction for maintenance is not limited to the fractions of the gross value laid down in that Statute.

Table "B" is intended to be used for the assessment of Class "B" properties (*i.e.*, tenement houses), and it, or Tables with any desired values of "*c*," "*m*," "*e*," and "*t*," can be constructed from the following formulæ: Let *V*, *G*, *R*, *c*, *m*, and *t* represent the same as before, and let "*e*" represent the "extra upkeep" expressed as a percentage of the gross rent; "*c*" and "*m*" being also given in percentages:—

$$\text{Then } G = \frac{nR\left(100 - c + \frac{et}{20}\right)}{5(20n + t)}, \text{ and } V = \frac{R(100 - c - ne)}{5(20n + t)},$$

$$\text{where } n = \frac{100}{100 - m},$$

If "*c*," "*m*," and "*e*" are taken as fractions, instead of as percentages, the above formulæ become

$$G = \frac{20nR\left(1 - c + \frac{et}{20}\right)}{t + 20n}, \text{ and } V = \frac{20R(1 - c - ne)}{t + 20n}, \text{ where } n = \frac{1}{1 - m}.$$

and if we put *e* = 0 in either formula, we revert to that given for self-contained houses.

CLASS "C."

This class of property is of the nature of artisans' dwellings where, following the decision in *Reg. v. St. George's Union*, each tenement must be assessed separately. The contingency balance and deduction for maintenance should be the same as those allowed in the case of self-contained houses (Class "A") let on weekly and monthly tenancies. Hence Table "A" may also be used for artisans' dwellings, provided that there is no "extra upkeep." As, however, there almost invariably is "extra upkeep" in these cases, Table "C" has been framed by means of the formulæ just given for computing Table "B," but with a smaller contingency balance and deduction for maintenance, both of which are lessened as the rental value increases. The total deduction in the case of artisans' dwellings is not limited in the metropolis to the maximum deduction for ordinary houses (*Western v. Kensington Assessment Committee*, 1907), and, consequently, the "extra upkeep" may be added to the deduction for ordinary maintenance.

Tables "A," "B," and "C" have been computed to the nearest

shilling, so that working scales can be at once compiled from them with equal readiness, no matter whether the unit of assessment be taken as 5s., 10s., £1, or any other sum. If Tables "A," "B," and "C" had been presented as working Tables, they would only have been applicable for the particular unit of assessment for which they were computed.

SPECIMEN OF TABLE "A."

For the assessment of ordinary weekly and monthly tenancies (Class "A" properties), giving the gross and rateable values to the nearest shilling.

Contingency balance.	Deduction for maintenance.	Weekly rent.	Rates, 3/-.		Rates, 11/6.	
			G. V.	R. V.	G. V.	R. V.
10 %	25 %	$\left\{ \begin{array}{l} s. \ d. \\ 1 \ 0 \\ \text{to} \\ 5 \ 0 \end{array} \right.$	$\left\{ \begin{array}{l} £ \ s. \\ 2 \ 2 \\ 10 \ 10 \end{array} \right.$	$\left\{ \begin{array}{l} £ \ s. \\ 1 \ 12 \\ 7 \ 18 \end{array} \right.$	$\left\{ \begin{array}{l} £ \ s. \\ 1 \ 13 \\ 8 \ 3 \end{array} \right.$	$\left\{ \begin{array}{l} £ \ s. \\ 1 \ 5 \\ 6 \ 3 \end{array} \right.$
		$\left\{ \begin{array}{l} 5 \ 6 \\ \text{to} \\ 10 \ 0 \end{array} \right.$	$\left\{ \begin{array}{l} 11 \ 17 \\ 21 \ 11 \end{array} \right.$	$\left\{ \begin{array}{l} 9 \ 4 \\ 16 \ 14 \end{array} \right.$	$\left\{ \begin{array}{l} 9 \ 3 \\ 16 \ 13 \end{array} \right.$	$\left\{ \begin{array}{l} 7 \ 2 \\ 12 \ 18 \end{array} \right.$
7½ %	22½ %	$\left\{ \begin{array}{l} 11 \ 0 \\ \text{to} \\ 20 \ 0 \end{array} \right.$	$\left\{ \begin{array}{l} 24 \ 5 \\ 44 \ 2 \end{array} \right.$	$\left\{ \begin{array}{l} 19 \ 8 \\ 35 \ 6 \end{array} \right.$	$\left\{ \begin{array}{l} 18 \ 12 \\ 33 \ 17 \end{array} \right.$	$\left\{ \begin{array}{l} 14 \ 18 \\ 27 \ 1 \end{array} \right.$
		$\left\{ \begin{array}{l} 11 \ 0 \\ \text{to} \\ 20 \ 0 \end{array} \right.$	$\left\{ \begin{array}{l} 24 \ 5 \\ 44 \ 2 \end{array} \right.$	$\left\{ \begin{array}{l} 19 \ 8 \\ 35 \ 6 \end{array} \right.$	$\left\{ \begin{array}{l} 18 \ 12 \\ 33 \ 17 \end{array} \right.$	$\left\{ \begin{array}{l} 14 \ 18 \\ 27 \ 1 \end{array} \right.$

SPECIMEN OF TABLE "B."

For the assessment of "tenement houses" (Class "B" properties), giving the gross and rateable values to the nearest shilling.

Contingency balance.	Extra Up-keep.	Deduction for maintenance.	Weekly rent.	Rates, 6/-.		Rates, 11/6.	
				G. V.	R. V.	G. V.	R. V.
10 %	5 %	25 %	$\left\{ \begin{array}{l} s. \ d. \\ 10 \ 0 \\ \text{to} \\ 30 \ 0 \end{array} \right.$	$\left\{ \begin{array}{l} £ \ s. \\ 19 \ 8 \\ 58 \ 5 \end{array} \right.$	$\left\{ \begin{array}{l} £ \ s. \\ 13 \ 5 \\ 39 \ 16 \end{array} \right.$	$\left\{ \begin{array}{l} £ \ s. \\ 16 \ 17 \\ 50 \ 12 \end{array} \right.$	$\left\{ \begin{array}{l} £ \ s. \\ 11 \ 7 \\ 34 \ 1 \end{array} \right.$
			$\left\{ \begin{array}{l} 32 \ 0 \\ \text{to} \\ 50 \ 0 \end{array} \right.$	$\left\{ \begin{array}{l} 61 \ 19 \\ 96 \ 16 \end{array} \right.$	$\left\{ \begin{array}{l} 43 \ 3 \\ 67 \ 8 \end{array} \right.$	$\left\{ \begin{array}{l} 53 \ 18 \\ 83 \ 17 \end{array} \right.$	$\left\{ \begin{array}{l} 36 \ 18 \\ 57 \ 14 \end{array} \right.$
10 %	4 %	25 %	$\left\{ \begin{array}{l} 52 \ 0 \\ \text{to} \\ 70 \ 0 \end{array} \right.$	$\left\{ \begin{array}{l} 100 \ 6 \\ 135 \ 1 \end{array} \right.$	$\left\{ \begin{array}{l} 71 \ 4 \\ 95 \ 17 \end{array} \right.$	$\left\{ \begin{array}{l} 86 \ 13 \\ 116 \ 13 \end{array} \right.$	$\left\{ \begin{array}{l} 60 \ 19 \\ 82 \ 0 \end{array} \right.$
			$\left\{ \begin{array}{l} 52 \ 0 \\ \text{to} \\ 70 \ 0 \end{array} \right.$	$\left\{ \begin{array}{l} 100 \ 6 \\ 135 \ 1 \end{array} \right.$	$\left\{ \begin{array}{l} 71 \ 4 \\ 95 \ 17 \end{array} \right.$	$\left\{ \begin{array}{l} 86 \ 13 \\ 116 \ 13 \end{array} \right.$	$\left\{ \begin{array}{l} 60 \ 19 \\ 82 \ 0 \end{array} \right.$

SPECIMEN OF TABLE "C."

*For the assessment of artisans' dwellings (Class "C" properties),
giving the gross and rateable values to the nearest shilling.*

Contingency balance.	Extra Up- keep.	Deduction for maintenance.	Weekly rent.	Rates, 4/-.		Rates, 11/6.	
				G. V.	R. V.	G. V.	R. V.
10 %	5 %	25 % {	s. d.	£ s.	£ s.	£ s.	£ s.
			1 0	2 1	1 8	1 14	1 3
			to				
7½ %	4 %	22½ % {	3 0	10 6	7 1	8 9	5 14
			to				
			5 6	11 11	8 8	9 8	6 14
			to				
			10 0	21 0	15 5	17 1	12 3

F. OLIVER LYONS

THE ORGANISATION OF CONSUMPTION.

It is a device of economic theory, consecrated by tradition, to construct hypotheses of simple cases, and then gradually to introduce disturbing elements until there is presented a picture bearing a resemblance to actual conditions. This practice is necessary in a science where repeated experiments are impossible; it is employed in certain branches of physiology, when the physiologist applies to man, *mutatis mutandis*, what he has learnt about the frog. It is, however, not always easy to know what allowances should be made under the changed conditions, and in physiology there is another method, equally applicable in economic science. Abnormal cases are made use of in the elucidation of normal conditions. Western civilisation in outlying provinces presents abnormal features; by studying these abnormal varieties we are enabled to understand more clearly the essentials of the healthy type. This method is only a variety of the ordinary economic practice: certain conditions are eliminated, and the problem to be solved assumes manageable proportions; it has, moreover, the advantage of actuality: it is no longer economics in the study but in the laboratory.

Such an analysis brings home to us the importance of the organisation of consumption as a factor of progress, and as a corollary the necessity for adequately treating it in economic theory. I wish to suggest that sufficient stress has not been laid on it in economic writings, to notice a few cases of organisation of consumption in England and then to consider consumption under other circumstances: from this it is possible to outline some conclusions as to the relation between progress and organised consumption.

There is a preliminary difficulty in estimating the attention which it receives at present. Dissociation from economic centres has its advantages, but it carries the drawbacks of its advantages: a bird's-eye view is possible, but it is difficult to keep in touch with the particular; this would only be possible if the latest

economic writings were as readily available in Asia or South Africa or on the Yukon River as they are in Bloomsbury. But there is no organised demand for such articles in these widely separated places; such demand as there is is inefficient, and they are therefore not supplied. It is therefore very possible that there are treatises on the organisation of consumption of which the ordinary student outside Europe remains unaware. But in the English school consumption has never received so much attention as production; more recent writers have not neglected it as an integral part of the formal exposition of their subject, and they have brought into prominence the doctrines of consumer's surplus, marginal utility, under-consumption, elasticity of demand, joint and composite demand. The collective action of consumers as regards light and water also finds incidental mention. There does not, however, seem to be any treatment of the general organisation of consumption in a form available to the student who is neither a specialist nor has access to large libraries. If any such treatment could be found, it might be looked for in the writings of the Socialist school; but if we examine the policy of the Fabian Society we find that in their theory of consumption they are still open to a charge of *laissez faire*. They value "the freedom of the individual to test the social value of new inventions"¹ as highly as Mill valued the freedom of the producer to palm off adulterated goods. They do not emphasise the fact that freedom depends upon organisation in consumption no less than in production. They put forward Socialism as a panacea not for the evils arising from ill-organised consumption, "but only for those produced by defective organisation of industry and by a radically bad distribution of wealth."²

Nevertheless, under normal conditions consumption is as vitally organised as is production, and however much Socialist theory may neglect it, in Socialist practice it is already achieving consciousness. We may take a simple instance: Given a cow and "natural economy," you will probably obtain pure milk; with organised production you will probably obtain watered milk. The individual may resent it, but his only remedy is to change his milkman—and very possibly find one who will add chalk or borax, or may skim the cream. It is only organised consumption that renders pure milk possible; the individual demand is ineffective. In Burma the milk supply is in the hands of natives of India. When an official tours, the Burmans have to give them careful intimation of his importance, so that he shall have milk instead

¹ Fabian Policy: Tract No. 70, par. 8.

² *Ibid.*, par. 14.

of milk and water. They cannot purchase it themselves. To revert to England. Recently there has been great talk about a national theatre. There is a demand for a type of play differing from that in general produced; it is gradually becoming organised and effective. As we extend the range of illustration, we perceive how widely consumption is already organised. A professor of economics, for instance, is a response to an organised demand—it was only the other day that a Burman friend was lamenting the absence of such a chair in Burma; the demand for it is not yet organised—and the *ECONOMIC JOURNAL* is also a product of the organisation of consumption.

We may now consider some features of consumption where the economic conditions are abnormal. If any report of material progress in an outpost of Western civilisation be examined, two matters are almost certain to be mentioned: the native is lazy, the native spends money on useless articles. We see "the West Indian negro using his new freedom and wealth, not to get the means of satisfying new wants, but in idle stagnation that is not rest."¹ In South Africa, again, reluctance to work is alleged as a characteristic of the native, and made the excuse for the imposition of labour taxes. Yet we find that he imports sardines and golden syrup in increasing quantities.² Similarly as regards the Jamaican, Sir Sidney Ollivier writes: "One cannot but be struck in the West Indies with the comparative insignificance of what the coloured man has learnt industrially from the white. . . . And yet in many respects he has learnt and acquired a great deal . . . he learns, and will learn, the things that he perceives to be for his own advantage."³ These natives of Jamaica and South Africa still are, or until recently were, savages; and reluctance to work and useless expenditure have been ascribed to barbarism. But in Burma, with which I wish more particularly to deal, the people are not savages; nevertheless, similar allegations are often made, and with considerable truth. It is a commonplace as often uttered by the business man as it is radically untrue that they are lazy workmen; and the absurdity of much of their expenditure could receive ample demonstration. In one house there was found a copy of Zola's *Paris*, and several other books equally useful to a Burman practically unacquainted with any other language than his mother tongue. In another house there were hat-stands, tables, pier glasses. They had cost many rupees only a little while before,

¹ Marshall, *Principles of Economics*, p. 165.

² *The South African Native*, p. 11, John Murray, 1908.

³ *White Capital and Coloured Labour*, p. 154.

but they had never been used, never cared for, and were already warped by the sun and mouldy from the damp. Nevertheless, the Burman has a definite civilisation; he has a considerable literature. In the eighth century hundreds of his books were sent to the Imperial Library in China, and although there have been periods of progress and decline, there have always been recurring intervals of literary activity; while he had a system of national education at a period when in England writing was a distinction reserved for very few. It is not contended that the literature is of a very high order; there has not been sufficient examination for this to be asserted or denied; but its existence necessitates our recognising him as civilised, apart from any modern vicer. Now, it may be admitted that money-making is an obsession with the modern Burman; but he has other very definite ideals, mainly connected with the Buddhist religion, partly with the Burman race. In connection with these ideals he has wants, but in the great majority of cases these wants are ineffective because they are not organised. It is important to notice that his want to possess things may be satisfied, even satiated, but his wants to do things, his activities, are gratified with difficulty. A very brief consideration will indicate the cause of this. In Burma there are certain articles—paddy, for instance, oil, and timber—desired by people outside Burma. It is necessary, therefore, to give the Burmans something in exchange. The commodities which a man wishes to possess are very much the same the whole world over; the want to do things varies from individual to individual. It is obviously easier to supply him with cheap pier glasses than with professors of Pali. Unless he very strenuously refuses more than a certain quantity of cheap pier glasses and very strenuously demands professors of Pali, it is the former that will be given in exchange for the produce of his country. But the demand for learning must of necessity be an organised demand. It is because consumption is not organised that cheap pier glasses are foisted off on him.

Pure milk has been cited in instance of a response to organised demand. In Burma analogous illustrations may be found. Ground-nuts are cultivated to make out the supply of olive oil in Europe; the refuse is employed as food for cattle. If the shell be ground up together with the nut, there is an increase of about 25 per cent. in bulk. The shell, however, is innutritious. So long as the extraction of the oil was carried on in the ordinary presses, the inclusion of the shell was an imposture that could be detected; trituration was insufficient, and it remained obvious

as gritty particles. Refuse of this nature the cultivator declined to give his cattle. But recent development of the industry has made it profitable for special machinery to be imported, which grinds the shell so fine that the adulteration cannot be ascertained except by chemical examination. This adulterated product is sold for the same price as the pure article. In this case the demand for one commodity is so definite that substitutes are refused; but the demand is not organised sufficiently to be effective if they are cunningly disguised.

It is interesting, and not without practical value, to consider these instances in connection with a classification of wants. For this purpose we may divide them into wants for commodities to support life and wants for commodities to extend life; the latter category may be sub-divided into those for commodities which extend life by being assimilated therewith and those which extend it by incorporation in them. This analysis is not intended to be exhaustively minute, but merely of convenient form and of sufficient accuracy for present considerations. Under each head and sub-head wants may be classified as quantitative and qualitative. Thus, milk is necessary to support life: pure milk is its qualitative modification; the possession of a pier glass is the assimilation of an external object—that it should be beautiful is a qualitative modification; the writing of a book is the incorporation of life with an external object—that it should be a book worth reading is a qualitative modification. These wants may be graded from lowest to highest in the order given. When production is organised, individual demand tends to be effectual only in satisfying the lowest wants; the better article, even a better article of food, is only produced so as to be generally available if the demand for it is so organised as to make it worth producing. For instance, in certain towns in Burma the wood-carving is purchased by tourists from the wood-carvers themselves. The tourist is incapable of distinguishing good work from bad, and there is no premium on good work because there is no organised demand for it. In other towns carving is purchased from the curio dealer, whose profession has developed critical capacities. For bad carving he will only pay a lower price: the demand for good work has been organised. Unless there is an organised demand for the special product there will be no special adaptation in favour of producing it; rather as the better article presumably takes longer time to produce, such specialisation as there is will tend to discourage its production. As we go up the scale of wants we find that it becomes more and

more necessary that consumption should be organised. If there is a demand for English education in which the children are not taught the dogmas of Christianity, considerable organisation is necessary if the demand is to be satisfied.

In the ordinary course of Western civilisation, consumption and production have gone hand in hand. During the past century poverty and the smoke from factory chimneys have sufficiently advertised the organisation of production; the organisation of consumption has been less noticeable to the passer-by, and by very many people has been taken as a matter of course. But we see that it is by no means a matter of course when the ordinary machinery of civilisation is acting under different conditions.

This is a point of some practical importance. The market for cheap pier glasses, after all, is limited; the native of South Africa seems to place limits on his consumption of golden syrup and sardines. The producer of such articles cannot hope to receive much from other countries if he rely on the permanent attraction of his produce. The demand is satiable. Unless the people be cultivated as well as the countryside, there can be no reason for surprise if trade decline because they tire of looking-glasses and at intervals "relapse into idle stagnation that is not rest."

The passage already quoted from Sir Sidney Ollivier's little book suggests that where activities are stimulated this danger is not to be apprehended. In South Africa, again, we read¹ that "In many districts large numbers of European ploughs" have been purchased by the natives. It is true, of course, that the demand for ploughs is capable of satiation; but this, resulting from the stimulation of activity, should in time lead on to further demands. There is another point of interest in this connection. Various theories have been put forward to account for the rise in Indian prices; the failure to stimulate activities may partly be responsible. Rising prices should increase imports; but certainly in parts of India, of which one is Lower Burma, large classes have failed to profit by the rise of prices, there having been coincidentally a fall in wages: the effective demand of these classes has therefore diminished, not increased. The constitution of a committee of inquiry into the cause of the high prices shows that these classes are not inconsiderable. Thus the increase in demand is restricted to a certain proportion of the population. If the wants of this proportion be artificially limited, they will

¹ *The South African Native*, p. 10.

not satisfy new wants, for they have none to satisfy, but they will be ready to pay more highly for the satisfaction of the few wants they have. At the same time the poorer classes will be bound to keep on producing, merely to satisfy the necessities of life. Thus, although there may be an increase in the volume of imports, and a decrease in that of exports, these will not act so readily in bringing down prices as they should in theory, or as they would in less abnormal circumstances. It is not contended that these factors have been acting with the rigidity of this example, but statistics lend support to the thesis that they have had a tendency in maintaining a high level of price. There has been a famine, but "India's purchasing power over foreign goods, during the recent famine, has been greater than at any previous period." At the same time exports have been increasing not only in value but in quantity. Cotton goods are the imports that most affect the poorer classes, but these have "risen a good deal more in value than in quantity." Despite this increase in the imports, the high level of price is unusually maintained. To assign any considerable importance to a tendency of this nature may seem so speculative that it is desirable to enforce the argument by a concrete example. It is a commonplace of Indian economic theory that the high price of land is due to the ordinary purchaser having no other convenient outlet for his capital. This is an illustration of the general limitation of wants, acting in one direction only.¹

It is not, however, the purpose of this essay to enter into a discussion of Indian prices; and the points that have just been considered concern distribution rather than consumption. But if a full analysis could show the hypothesis to be founded upon fact, there might be valuable results, for it would be possible to bring home to the producer with more effect than merely theoretical demonstration the vital relation between his interests and the encouragement of other peoples' activities. The encouragement of new wants is often claimed as the function of Western civilisation in outlying countries, but in this statement there is a confusion between wants to possess things and wants to do things which Mill avoided in his first enunciation of the proposition. Such wants can be satiated; activities are insatiable; it is the organisation of the latter that is necessary. At present it is nobody's business to facilitate this organisation. It cannot be undertaken by the State, for it is incompatible with

¹ For this and subsequent extracts relating to progress and imports, see ECONOMIC JOURNAL, March, 1909, "Recent Economic Events in India."

the necessarily *laissez-faire* administration of the bureaucratic government obtaining in tropical dependencies and colonies. Production has been organised both in East and West, but in the latter consumption has been neglected.

In this lies a danger to Western civilisation; and this is the ultimate basis of many of the objections to it on the part of those peoples who receive its benefits unwillingly. The test of civilisation is the growth not of new wants but of new activities, and these are not fostered by organised production. If progress is to reach beyond a certain point, it is the organisation of consumption for which there must be an organised demand.

J. S. FURNIVALL

THE TRUE COST OF SECONDARY EDUCATION FOR GIRLS.¹

THE Head Mistresses' Association, in its pamphlet, "The True Cost of Secondary Education for Girls,"¹ has issued not only a clear statement on the cost of building and equipping a secondary school, but what may also be regarded as a Manifesto on Salaries for the Profession for Women which offers the best prospect to the majority of its members.

The Association was well advised to omit from this edition of the pamphlet the tables on the cost of living which were included in the first edition. These tables were then clearly included in order to show, not what a woman ought to spend on maintaining herself as an efficient citizen and teacher, but on what sum of money a woman, aided by a kindly Fate, a strong constitution, some friends, an indomitable will, and a wide charity can manage to evade an early grave—can, in fact, exist. But "existence lean, with skies lead-grey" is a different matter to life and happiness; and the teacher who exists only will scarcely rouse her pupils to a true appreciation of life.

The two primary considerations on which, it is stated, any scale of salaries must be based, are : (a) the expense of equipment for the work ; (b) the cost of efficient living. Of these, (a) varies according to the grade of teaching for which the candidate has prepared. Hitherto, the elementary school teacher has been trained to a great extent at the expense of the State, and a university career has not been a *sine quâ non*. The teacher in the secondary school requires a degree, or its equivalent, a period of training, and, sometimes, residence abroad—and this generally at her own, or her parents', expense. She is surely entitled to expect interest on the capital expended on the preparation for her career.

As regards (b), the cost of efficient living has risen very considerably during the last few years—the Head Mistresses say the last seven years—with the rise in the standard of life and in the price of necessaries. With this cost we propose to deal later.

¹ *The True Cost of Secondary Education for Girls: The Educational Supply Association, 42, Holborn Viaduct, E.C.* Price, 3½d., post free.

An article on "Educational Finance," from the pen of Mrs. Bryant, appeared in this JOURNAL in March, 1894. It ended with these words :—

It is not easy to over-rate the importance of building up a custom of fair wages to women in some field of work. In education we have a large and typical professional occupation for women, and one so controlled as to facilitate the adoption of a rate of remuneration governed by the principle of the standard wage. And obviously, if we can raise women's wages in one great occupation, the operation of the laws of supply will tend to make other women's occupations participate in the rise. Get some field in which women are paid as well as men *for the same work*, and the impulse of that advantage will be felt throughout their labour-world.

Moreover, in this, as in every other occupation, if women continue to be paid less for the same work than men, they will eventually, in the public eagerness for cheap education, be called in to undersell the men in certain branches. The economic consequences to the stronger sex are obvious. They are the more deserving of prudential reflection in England because some of them are already happening in the public schools of the United States.

That the latter portion of Mrs. Bryant's warning, written fifteen years ago, was truly prophetic, appears from the following quotation from the *Schoolmaster*, the organ of the National Union of Teachers, for December 25th, 1909. The *Schoolmaster* commented on the appointment of a lady as a Modern Language teacher at one of the London County Council's secondary schools for boys. The appointment was made because no man with the requisite qualifications applied for the post. The "educational" aspect of the matter is beside the mark here—but the appointment is declared to be indefensible also "from the professional point of view." The *Schoolmaster* inquires :—

Are women to be used in boys' schools to depreciate the market value of men? Salaries depend on the law of supply and demand. If the supply is greater than the demand, salaries drop; if the supply is less than the demand, salaries rise. This is a natural law, which can only be broken by unnatural, artificial means. As we have pointed out, the demand for modern language specialists exceeds the supply. Consequently, they can command good salaries. But if women are used in their place, then the natural law is broken; the demand will decrease and salaries will be forced down by purely artificial pressure.

It would appear that the obvious way of preventing this result is to require that when a woman does a man's work, she should

be paid at the man's rate. If it takes three women to do the work of two men, the women would on this supposition have a two-thirds salary. There would be no inequality and no under-selling either. The *Schoolmaster* would do well to consider seriously the advisability of advocating equal pay for equal work.

There are, from the woman's point of view, three matters for consideration, all of which are hinted at in the quotation from Mrs. Bryant's article on "Educational Finance." They are:—

1. Equal pay for equal work.
2. The cost of efficient living.
3. The effect of a low standard of remuneration of assistants in the teaching profession on the army of women workers outside.

Although "equal pay for equal work" in the teaching profession has become the rule in certain countries and states, *e.g.*, Australia: in the Junior Grade of the State Education Department; in the following of the United States: Wyoming, Colorado, Utah, Idaho, and New York; and in Norway (for civil servants), with, we believe, no deleterious effect, there appears to be, and probably for some years will continue to be, a strong objection on the part of English men, and women also, to credit the statement that women are capable of performing the same work as men. Yet this has been proved, as the lawyers say, "up to the hilt." After discussing the matter with more than one authority, the writer is inclined to believe that, although women are capable of doing at least equally good work (in the teaching profession) with men, they are not on the average, at their present stage of development, capable of doing the same amount of such work without detriment to themselves and to the maintenance of their ability. This incapacity for getting through the same amount of work arises, partly from physical causes, but also, to a great degree, from a woman's social and domestic claims. What woman is there who has not many personal, domestic, and social duties to perform, from which a man, on account of his sex and tradition, is free? Were assistant masters inclined, or obliged, to devote their evenings to the preparation of the lighter forms of clothing, as many assistant mistresses devote their leisure to blouse-making and fancy needlework, not to mention darning and other personal sewing, it is possible that they would in time become unable to perform the same amount of work that they now get through without strain. Yet needlework goes towards the equipment of a woman's personality, and without it she would be less complete. The assistant mistress, in her earlier years of work and until her "annual increment"—if she is lucky

enough to serve under a rising scale—has placed her on the other side of the border-line, where anxiety and parsimony meet sufficiency and a contented mind, is occupied with many domestic details from which a man is free. She makes her bed, dusts her room (even, perhaps, prepares and lights her fire), and is to a very large extent her own laundress. The mere suggestion that an assistant master at one of our public schools should spend his Saturday evenings “getting up” his shirts would raise a smile of derisive contempt! Yet a woman has to do these things, as well as her professional work, or pay some one to do them for her. We would lay stress on the justice, if women are to perform these domestic duties, of allotting to them less work than is expected from a man. They should be paid at the same scale, but the amount would be less, for the very reason that women’s hours should be shorter. Or, if they are not to have an allowance in time for the performance of these duties, in common justice they must receive sufficient to enable them to perform them by proxy! There is, however, a great deal that most women must do for themselves and others which cannot be done by others for them. The double burden carried by the married elementary-school mistress with a family is indeed a marvel.

There is one suggestion we would make to the objection raised by the economist who disapproves of “equal pay for equal work” on the ground that women have no dependents.¹ The fact is that many women have dependents due to death, incompetence, or unwillingness of the men upon whom these others should depend. The support of the widowed mother and the younger brothers or sisters is often left to the woman, while her brother chooses the more joyous lot of forming a new family. Sometimes it is the brother with the family who dies or fails, and the woman who is a teacher cannot see her brother’s children without striving to secure them a start in life. Sometimes it is the widow, or the deserted wife with her own children dependent on her. Indeed, apart from tragic circumstances altogether, most women, and especially teachers, have links with needy ones among the young to whom they minister of their slender substance, very much to the benefit of the community in the output of young persons educated and skilled.

It is, indeed, conceivable that a woman with no incumbrances in receipt of “equal pay,” might be an “over-paid” woman, although under present conditions the description is surely a

¹ The Secretary of the Central Bureau for the Employment of Women states in her pamphlet, “An Inquiry into the Function of Employment Bureau” (p. 8) that out of 200 cases investigated, taken at random from her books, over 50 per cent. were widows, and 37 per cent. had husbands who were not supporting them.

"picturesque exaggeration." "Such a woman would, however, be in a position to become a regular employer of labour, and she would thus lessen the vast army of unemployed. For instance, two assistant mistresses with high salaries could afford to share a good flat and employ a couple of servants. At their present rate of salary they too often live in "apartments" more or less cheerless and uncomfortable, and add to the already heavy work of the one servant of the establishment: or they choose an unhomely existence, free from domestic responsibilities, in the restless atmosphere of a woman's residential club.

The social duties of an assistant mistress in a large girls' school increase yearly, in these days of societies and associations. There are "Old Girls'" meetings, hockey meetings, the School Guild, &c., &c., with the working of which the assistant mistresses are closely connected, and which are sometimes a heavy tax on their leisure.

The cost of efficient living surely includes provision for old age. The cruelty of paying a woman a low salary simply because with her professional duties she has also to carry on her domestic and personal ones, is the more apparent when it is realised that a woman's working life is shorter than a man's; that she, therefore, has to provide for her old age in a less number of years than a man, and that (as is borne out in the appendix to this article) her old age will probably be of longer duration than her brother's. For it is a fact that when a man relinquishes his life-work he loses his interest in life, and often he is almost immediately overtaken by old age and death; whereas a woman, with her many-sided interests and affections, lives on.

There is an interesting paragraph dealing with the cost of efficient living in an article by Miss Dora M. Jones, entitled "The Cheapness of Women," which appeared in the *English-woman's Quarterly Review* in October last year. Miss Jones makes a quotation from Mr. Cadbury's book, *Women's Work and Wages* to the effect that in Birmingham thirty shillings a week is the amount which an educated woman has to expend on board, lodging, and travelling to and from her work. This, out of a salary of £100 a year, leaves a margin of £15 for dress, and £10 for books, presents, charities, amusements, holidays, doctors (and dentists), and saving towards old age! The lowest cost of board, lodging, and travelling in London is certainly not less. In London clothes, hats, boots, and gloves wear out incredibly fast; in London the laundry charges are higher than in the country; and steam laundries appear to have been instituted for the express purpose of destroying garments!

That any professional woman should be expected to provide for "books, presents, charities, amusements, holidays, doctors, dentists, and old age" out of the round sum of ten pounds is a disgrace to the community which tolerates such a farcical idea. It is possible that the woman in question may have been trained to consider a tenth part of her income as "Corban." It must be remembered that if a teacher is to remain efficient and up-to-date she has to provide herself with some books, a library subscription, some newspapers and magazines; if she is to maintain her position in society she has to give some occasional presents, and incidental tips; to keep healthy-minded she needs some recreation, such as theatres or concerts. For some of her social gatherings she must don an evening dress, which often necessitates a cab-fare. If she live in London, she must have an occasional day in the country. A trip abroad during the summer vacation will swallow up anything from £12 to £25. On her present salary, how is it possible for the average assistant mistress to provide for doctors, dentists, and old age?

After considering these matters, we find ourselves in full sympathy with the Head Mistresses' statement:—

Notwithstanding the gratifying fact that the salaries offered to assistant mistresses have recently risen, it must be remembered that the cost of living has materially increased during the last seven years, and it now appears impossible to maintain a reasonable standard of comfort on less than £120 a year. Provision for old age or illness is impossible unless the salary exceeds this amount.

We consider, therefore, that a fully qualified teacher (and by fully qualified we mean a teacher who has a degree and professional training) should receive for her probationary year a salary of not less than £120. If her appointment is confirmed, the salary should rise automatically to £180. The senior mistress in any good school should rise to £200 at least (in London, £220). In large schools which prepare many pupils for the universities, and where there is considerable elaboration in the organisation, there should be some mistresses whose salaries rise to £300 or more.

It is very much to the credit of the London County Council that this scale from £120 to £220 was, from the initiation of their secondary-school system in 1903, established by them. The men's scale is from £150 to £300.

Our last point, the effect of a low standard of remuneration of assistants in the teaching profession on the army of women workers outside, is dealt with indirectly in the article on the "Cheapness of Women" already alluded to. Miss Jones quotes statistics which show that the teaching profession does indeed

offer "the best prospect to the majority of its members." The Post Office Clerk (who secures her position in competition with many hundreds) receives a commencing salary of £65 a year, rising by £5 to £100; first-class clerks begin at £115, and rise to £130, and a few principals receive £200, and a very few £300. These clerkships offer "the best paid work that any ordinary well-educated woman can expect." Sanitary inspectors, nurses, shorthand writers and typists, follow. Without a doubt, the profession of a secondary school teacher is the best paid for the majority of its members. If the Head Mistresses' Manifesto is acted upon with more or less speed, there cannot fail to be a remarkable and much-needed change in the rate of the remuneration offered to women in other employments; for Mrs. Bryant's already quoted remark, "Obviously if we can raise women's wages in one great occupation the operation of the laws of supply will tend to make other women's occupations participate in the rise," is as true now as it was in 1894.

RUTH YOUNG

APPENDIX.

Table of Ordinary Immediate Annuities without return of purchase money, furnished by the Commercial Union Assurance Company, Limited.

Age last birthday at entry.	Annuity which £100 will purchase.		Cost of Annuity of £10.	
	Men.	Women.	Men.	Women.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
33 ...	5 2 10	4 13 6	194 9 10	213 18 1
43 ...	5 17 6	5 6 2	170 4 4	188 7 8
53 ...	7 1 2	6 8 4	141 13 7	155 16 11
63 ...	9 9 8	8 12 2	105 9 0	116 3 4
73 ...	14 2 4	12 19 8	70 16 10	77 0 6
80 ...	19 3 6	17 16 10	52 3 1	56 1 0

Table taken from the "British Offices Life Annuity Experience, 1893," showing number of years in the "expectation of life," or average after-lifetime, at various ages, for men and women respectively.

Age.	Select Annuitants		Non-Select Annuitants.	
	Men.	Women.	Men.	Women.
55	17.4	19.7	17.0	19.3
60	14.3	16.5	13.9	16.1
65	11.5	13.3	11.1	12.9
70	9.0	10.4	8.6	9.9
75	6.9	7.9	6.4	7.4
80	5.2	5.8	4.6	5.3

LOT-MEADOW CUSTOMS AT YARNTON, OXON.

THE man who found himself confronted on a summer's day near Oxford by an invitation on an auctioneer's placard to buy three-quarters of one William of Bladon might feel uncomfortable about it; the more so if he noted further that he could buy in two separate lots two other quarters of William. William would appear not only a victim of outrage, but himself something of an outrage upon nature, as possessing five quarters. However, if our friend went to the sale and bought some of these sanguinary-sounding fragments, he would find himself thereby concerned, not in any effort of the mediæval judicial system, but in a matter older even than the Middle Ages—the drawing of lots for the mowing rights in the water meadows of Yarnton, a small village lying off the high road to Woodstock, at a point some four miles north of Oxford. These rights are almost the only living survival of the old customs of open-field agriculture, the system on which the life and development of the English village and manor turned for centuries. In many parts of England the inanimate marks of the system may be traced: fields which still show, under the crust of modern methods, the swelling ridges of the old acre-strips and the more significant balks or headlands dividing the sets of strips; hills which are still terraced by the "linches," the flat steps which the strip system produced by the constant turning of the soil in one direction. But the Yarnton water-meadows show more than this. The strips there are not ancient marks now obsolete but are still the limitations under which the hay is cut. No readjustment in the days of the Enclosure Acts has substituted here, for the in-and-out ownership, a convenient parcelling of land. In short, a necessary part of the year's work of the farmers of Yarnton is done to this day under conditions which governed it before Domesday was written. That is the chief reason for calling it a living survival. A cynic might find other signs of its genuine vitality in such facts as these: The Yarnton people are not oppressed by respect for its antiquity, but think it an astonishing, muddling old business; they squabble

occasionally over strips, as no doubt they did before Domesday; and they have never attempted to alter the system in principle.

A brief reference to the conditions of open-field agriculture may be pardoned, as a preface to the relation of the customs at Yarnton. The arable land of a village was in principle communal property, and in order that the shares might be fair, and might be given fairly in any newly broken land, each portion or "shot" of the land was divided into strips of a customary acre each, and a man's share was a strip in each shot. "Allotments," says Vinogradoff (*Growth of the Manor*, Book 2, Chapter IV.), "are made, not in patches set apart for the use of the different householders, but in strips assigned to everyone in each of the shots or fields occupied for tillage by the community." Thus a householder's holding, instead of being like the modern farm, a number of adjoining fields, would be a number of acre-strips scattered over the common ploughed land of the village. A map in Seebohm's *Village Community* shows a specimen of such a holding in dotted pieces. In every field portions were left unploughed, usually a strip running at right angles across the end of a set of acre-strips; these were the balks or headlands where the plough was turned, and they served, together with strips in some cases parallel with the ploughed strips, for roadways for a man to cart off his crops without crossing lots belonging to other people. To reconstruct the idea one has to sweep away all sense of a modern village, houses set here and there amid a sea of hedged fields, some pasture, some under crops. One has to think instead of a group of houses, some with small enclosed gardens, the manor with a larger enclosed space, and the church and rectory house—the whole group an island in a wide space of unhedged ploughed land, which one might figure as diapered to a bird's-eye view by the various sets of wide strips, each set running in a different direction. Now, when a village also possessed meadows (that is, grass-land for hay-crops, to be distinguished from mere pasture), it would of course hold them similarly in strips. But here an interesting point arises. The meadow lands kept much longer than the ploughed lands the severest form of communal ownership, in that an individual's strips were shifted by lot each year, so that the man who in one year had a poor strip would in the next year have his chance of a good one to redress the balance. At what period arable land was relieved of this severity cannot be known. There is the well-known passage in Tacitus to prove that it existed in Germany, and both Vinogradoff and Maitland admit traces of it. Vino-

gradoff says : "The most complete inference from such a general conception" (i.e., the conception that the village land was common property, and that even permanent ownership did not mean private property in the Roman or the modern sense) "would be to treat individual occupation of the land as a shifting ownership, to redistribute the land among the members of the community from time to time according to some system of lot or rotation. The western village community does not go so far, as a rule, in regard to the arable. . . . But even in the West, and particularly in England, traces of shifting ownership may be found. . . . The arable is sometimes treated as meadows constantly are; every householder's lot is only an 'ideal' one, and may be assigned one year in one place and one in another." (*Villainage in England*, Essay 2, Chapter I.) Professor Maitland, in a passage which brings us nearer to the subject in hand, says : "So far back as we can see, the German village" (by which general term he includes the English village system before the Conquest) "had a solid core of individualism. There were, however, lands which in a certain sense belonged to it, and which were not allotted for good and all among its various members. For one thing, the meadows were often subjected to a more communal scheme. In the later Middle Ages we may see them annually re-distributed by rotation or by lot among the owners of the arable. The meadows, which must be sharply distinguished from the pasture, were few, and, as we may see from Domesday and other records, they were exceedingly valuable. Probably their great but varying value stood in the way of any permanent partition that would have seemed equitable. Still they were allotted annually, and the right to an allotment 'ran with' the house and the arable strips." (*Domesday Book and Beyond*, page 348.)

But "the later Middle Ages" provide dim seeing for any less gifted persons than Maitland; and indeed there is no need to look so far back, since Yarnton provides the spectacle of this annual redistribution of the meadows to our corporeal eye. Enough has now been said by way of preface to give the key to the scene which would present itself to our purchaser of parts of William of Bladon when he attended the lot-drawing. Early on an appointed Monday morning (it used to be the Monday after St. Peter's Day, but is now a moveable date adjusted to the condition of the grass) he would make his way past the village church of Yarnton to a farm-yard gate, through the yard, and down a rough lane leading under the main Great Western

line to Worcester. Here the signs of water-meadows force themselves upon his eye. Beside the lane are watery ditches full of tall flowering rushes and flags and edged with loose-strife. The water-violet may be found here in its season. The lane ends abruptly at a gate which opens upon a wide expanse of meadow. On the right the hedge of some enclosures runs out some way into it, but turns off again, cutting out only a fragment. To the left runs the railway line on its way to Oxford. Far off in front the willows of the young, if not still "stripling," Thames mark the further boundary. The huge stretch of grass is untrodden, and our stranger, waiting for a lead, will no doubt be shocked when some of the villagers, coming down for their share in the lots, open the gate and forthwith make their way on foot and even in carts straight into the standing grass. They are in fact following, with the unexpressed knowledge of long routine, precisely such roadways as in the meadows corresponded to the headlands of the arable, left to give each man access to his strip. The little company will halt, again with the knowledge of routine, at a certain spot. Roughly, a mental image of the meadow may be made thus: Imagine a somewhat vaguely shaped oblong of seventy acres; then place in it a large capital "T," the end of the down-stroke resting on one end of the oblong, and the cross-stroke cutting across the oblong some two-thirds of the way up. This "T" represents the headlands, and the strips run off at right angles, from either side of the down-stroke to the sides of the oblong, and from the cross-stroke to the upper end. It is at the junction of the strokes of the "T" that the drawing begins. In the grass, scarcely to be seen except close at hand, stand rows of posts along the sides of the headlands. Some are of wood, some are big rough stones. These mark the strips, and a lot is drawn at each post to settle the owner for the year of the grass on that strip. Away at the further end of the strips are corresponding posts, still less visible, but to be found in due time. The tithe-strips are marked with large hewn stones, almost as big as tombstones, and these do not come into lot-drawing. Our group of men waits for the coming of the meadsmen, two of the principal farmers of the place, who superintend the lot-drawing, keep an eye on the subsequent pasturing rights, and generally attend to the upkeep of the meadows. The meadsmen arrive, one bearing a little canvas bag for the lot-drawing. In that bag are thirteen small round balls, about the size of a bagatelle ball, turned out of hard wood, an ancient possession of which the village is very proud. They are distinguished one from another

not by numbers but by names written on them; and a queer company the names are. They may be put down at once: Water, Jeoffrey, Water Molley, Perry, Harry, Dunn, Rothe, Gilbert, Boat, White, Green, Freeman, Boulton, William—the last being William of Bladon, abbreviated to the exigencies of a small ball. Each portion or “shot” of the meadow contains thirteen strips, corresponding with the number of balls. Each ball represents a right to mow the grass of one lot, and a subsequent right of pasture, and is either owned by some farmer in virtue of his farm, or bought, whole, or in portions of a right, from an owner of rights. Either by tenancy or by purchase, therefore, the men in the meadows this July morning have each a right to mow grass, and this right goes by the name of a ball. Consequently, when the meadsman with the canvas bag, standing by the first post, holds it out to one of the company—if a lady be there as a spectator she will be courteously asked to draw—and the ball is drawn, the name on the ball is called out, and the question asked, “Whose is that?” The owner speaks up, and the other meadsman, who has a notebook in his hand, writes down the name. His list may be useful in cases of subsequent dispute. Meanwhile at the head of the lot a small space has had the tall grass scythed off it by one of the men, and on the cleared space the man who is now owner of this lot for the year’s mowing cuts his initial large in the turf with a big knife. It is a revelation of the strength of a countryman’s arm to see him slash out long strips of turf as swiftly as a townsman cuts butter. But, quick as he is, the group, with the two meadsmen, has already moved down the headland to another post, another lot has been drawn, and another owner for the year put in possession. So it goes down one side of the headland; so it comes back along the other side; and so it walks finally the length of the other headland, the cross-stroke of the “T,” allotting the third set of strips. Each time one of the balls comes up, its owner receives, or joint owners receive, a strip, so that in the end each has three strips scattered in different parts, possibly even at remote corners of the meadow. They are all remarkably indistinguishable at present, but the next stage does something to mark them out. Men who are neighbours for the mowing mark their limits. One will stand by the post on the headland; the other will go round to find the corresponding post at the far end, and when he has found it will come up through the grass towards the man on the headland, using a shuffling step, so that when he arrives he has made a line of trodden grass from post to post. A week or two later, if one looks down on the meadow from the railway line, when some

of the strips have been mown and others are still standing, one will see quite clearly at last the strip nature of the meadows. One can see the "diaper" pattern of the "shots" or groups of thirteen running in the three different directions, and get in that way an authentic view of England that has elsewhere almost ceased to exist. There remain two aspects to consider, the mowing regulations and the rights of common—that is, the rights to pasture animals on the meadows after the hay is off.

It must, however, be remarked first that for the sake of clearness in the concrete example of the customs this brief description has been confined to the lot-drawing in one meadow, but there are three large meadows here which are all "drawn." Two of them, save for an artificial and imaginary boundary, form really one great stretch beside the river: the third is an island, enclosed by the main stream of the river and a branch which is taken off at a weir and serves a mill at Wolvercote, a village nearer to Oxford. The two former meadows are, strictly speaking, the "Yarnton meadows," known as Oxe and West Mead; the island meadow is called Pixey. The lot-drawing in each takes place on a separate day. Oxe comes first on a Monday morning, generally early in July. West Mead is drawn on the following Thursday morning, and Pixey on the following Monday morning. Oxe is the meadow the drawing of which has been described; it contains seventy acres, and is drawn three times. West Mead contains about eighty acres, and is drawn five times—that is, there are five batches of thirteen strips each, running, as in the other cases, from regular headlands. Pixey contains about two hundred acres, of which the greater part is not drawn. About sixty acres come under lot, and these are drawn only once; there are, indeed, two batches of strips, but the headland runs straight down the middle, and each ball does duty for a strip on either side of the headland—that is, for two strips at once.

The mowing regulations are far less exacting now than they were even a hundred years ago. Up till that time the rule survived that the complete mowing of each meadow must be done on the day on which the lots were drawn. Oxe was drawn on the Monday following St. Peter's Day; West Mead was drawn on the following Monday, and Pixey on the Monday after that. Now, in the early Middle Ages, when, as there is reason for supposing, each man would only have less than an acre and a half in either Oxe or West Mead, the single day's mowing was not impossible. But as lots began to accumulate in fewer hands, a man's holding would become vastly beyond his power, and he would have to employ labour. The labour even of the village would be

insufficient, labour in neighbouring places would come for the chance of a day's wage, and so the custom would arise of a great junketing attached to the Yarnton meadow-mowing. There was, in fact, for a very long while a complete fair held down by the meadows in the mowing-time. Add to the natural proclivities of merry-makers the fairly frequent quarrels which were bound to arise over the apportioning of the strips, and you have all the material for an occasional ugly riot. A hundred years ago, indeed, it was so much more regular than occasional that Mr. Vaughan Thomas, the vicar, stepped in, and, in spite of a good deal of opposition and misunderstanding, succeeded in getting the mowing-time extended to two or three days for each meadow. There is now no limit put to the time allowed for mowing except that which is inherent in the fixing of a date for the pasture common rights to begin. Naturally, the turning of stock into the meadows represents a date before which the hay must be removed. But the tradition of the older methods persists, and you may have men in the meadows now on a lot-drawing morning telling you how much livelier it was when "there were a hundred men lined up by the hedge yonder, with flowers in their hats, waiting to be hired for the mowing." A trace of the older methods persists, too, in the continuance of the custom of drawing the meadows on different days. It is odd that it has never occurred to anyone, now that the mowing is so much more free in its dates, that the lot-drawing might easily be done for all three meadows on one day. But, mercifully, custom is persistent in country villages. It should also be mentioned that, when they come to the point of mowing, men often make private and wholly unofficial rearrangements of their strips or portions, for convenience in mowing. A man who has bought a quarter of a ball would have a tiresome job to mow in Oxey three long, narrow strips (the quarter being taken lengthwise, and not transversely), each of little more than a quarter of an acre, and each at a distance from the others. To save himself this finicking work, he will probably arrange with the owner of the other three-quarters of his ball to take all his rights in one strip, giving up in return his portions of the other strips. Also, a man who has two strips only separated by one other may effect an exchange which will bring his strips together, and give a good-sized area for a machine to work round. One of the excitements of the lot-drawing is the chance of a man getting his strips well together, as may happen in the chance of the lot to a farmer owning more than one ball.

The rights of common commence in Yarnton meadows on St. Bartholomew's Day, August 24th, the day of Yarnton village

feast, the Church being dedicated to St. Bartholomew. The date of commons in Pixey, however, is August 12th. The ratio of common rights is one head of cattle to an acre, or one horse to two acres. The privilege of common here is really very great. If the summer is at all hot and dry, many a farmer is hard put to it to find water for his stock by the time August is well advanced. How great his advantage, then, if he can turn some stock on to these great meadows, which have the Thames running along them for a mile or so! These considerations have often in late years led the meadsmen to allow the date of common to be advanced considerably. If a summer is hot and dry, the hay will be off the meadows early, and there can then be no reason why the stock should have to wait for a conventional date, instead of having earlier the advantage of the water. The common rights are carefully superintended by the meadsmen, who visit the meadows occasionally and count the stock at pasture, to see that no one is unfairly turning out more than his prescribed number of head. If they ever do find an excessive number, the task of singling out the delinquent must be difficult. Presumably it has been found in practice of late years that entirely unauthorised persons have no chance of putting stock on the meadows successfully, since the old custom of branding the stock of holders of rights has been abandoned. But the branding-iron still exists, and is an extremely interesting tool. It bears, not "Y" for Yarnton, but "E" for Erdington, the mediæval name of the village. As the "Y" form of the name was thoroughly established by the seventeenth century, the branding-iron must be very old. It is as much a cherished possession of the village as are the little lot-balls.

This article should not close without an expression of sincere thanks to the two present meadsmen, Mr. Frank Hutt and Mr. Stephen Howse, for much information given with the greatest kindness. The meadows in which they exercise their ancient office may be seen any day by travellers on the Great Western Railway line to Worcester. Soon after passing the point at which the Birmingham and Worcester lines part, about three miles from Oxford, the passenger will find himself looking down from the railway embankment upon meadows with the lines of the Thames willows here and there. If he looks out for the canal connection passing under the line and making straight for the river, he will then see, stretching away from that cutting, a broad expanse of grass. That is the historic ground which this article endeavours to commemorate.

R. H. GRETTON

REVIEWS

A Project of Empire. By J. SHIELD NICHOLSON. (Macmillan, xxv. + 284.)

PROFESSOR NICHOLSON believes that the United Kingdom is, or soon will be, unable to bear the burden of Imperial defence, and that some sort of federal government must be instituted which will distribute the charge more equally. But a federal government established for purposes of defence would extend its operations beyond that sphere. Since it needs a fisc, it needs also a fiscal policy, and since opulence is increasingly essential to defence, the whole empire would see the advantage of yielding to the central authority all powers which could promote the wealth of the whole. Here the author comes upon our civil dissensions, and his book is a demand that the combatants should sign articles of agreement. He extracts these from the *Wealth of Nations*, especially those parts of it where foreign trade and the colonies are discussed. To the protectionists he says: "You are wrong in thinking that free trade is bankrupt of imperial policy. Adam Smith, after demolishing a mercantilist imperialism to which what you are now proposing bears a dangerous resemblance, erects on its ruins out of the first principles of the *Wealth of Nations* a structure that would yield at once more opulence and more defence." To the free traders he says: "Abandon the dogma of cheapness, and substitute for it a real understanding, derived from Adam Smith, of the case for and against free trade. Appreciate the force of the exceptions which he admitted, and meet your opponents on the basis of fact and in the spirit of patriotism." If our parties will listen, he holds that a large measure of common agreement will flow from a clearer envisaging of the imperial ideal. The "sub-conscious" temper of the empire will set towards imperial free trade, whilst an appeal to facts conducted by some impartial authority will determine in what direction, if any, protective measures are desirable.

The book is in many ways a great one. It has three requisites of literature: a subject matter of interest, a clear and personal

style, a broad and sympathetic outlook. I am not equally convinced that the thought is clear throughout. I find it difficult to decide, because Professor Nicholson chooses to convey his meaning largely by the aid of ideas extracted from Adam Smith, and in numerous cases I find it impossible to determine whether he himself shares the limitations of that writer or merely omits to notice them through fear of the charge of pedantry. This difficulty arises in regard to the central theorem of the book which is taken from Book II., Ch. V. of the *Wealth of Nations*: "On the different employment of capitals." Adam Smith thought that the interest obtainable on an investment was not merely no complete criterion of its total advantage, but not even a rough guide to it. Investment in agriculture did society most service. After that came manufacture, commerce, retail trade, foreign trade, foreign investment in a descending scale. None the less, men would, if left to themselves, choose those investments which were most advantageous to society, but only because of the superior security or amenity obtainable in them. Whether this superiority existed in Adam Smith's day I do not know, but Professor Nicholson points out forcibly that there is little reason to assume its existence now. The argument is, indeed, a mere makeshift. Adam Smith required to show that the State might safely leave investors alone, and as he had not worked out the problem thoroughly he was compelled to insert a treacherous stopgap. It is strange that Professor Nicholson should take it so seriously, and stranger still that he should not refer to the alternative solution of the problem which the marginalist school has provided. Those who possess the intellectual tool which Adam Smith lacked, the concept of the margin, are free both to accept his premiss that the total advantage of different kinds of investment varies, and to reject his conclusion that the rate of interest is an unsatisfactory guide to investment. The machinery by which capital is distributed to the general advantage is very far from perfect, but if I understand Professor Nicholson, he denies that it exists. The implication of his argument is that as regards, for instance, the distribution of capital between mining and transport no general force operates to maximise social advantage. The lay reader would, I think, almost necessarily receive this impression, and would not be completely satisfied with the arguments that convinced Adam Smith that it was none the less inexpedient for the State to direct investment.

It is true that Professor Nicholson is chiefly concerned not with the distribution of capital between different home employ-

ments, but with its distribution between the home country and foreign parts. He emphasises especially the truths that an exchange between London and Edinburgh yields a double advantage as compared with an exchange between London and Lisbon, and that investment at home yields a greater social advantage than investment abroad. As regards the first point, he hardly brings out the fact that exchange with the foreigner connotes no diminution of exchange between natives unless it can be supposed to increase the net instability of industry. A can offer more goods to B if he makes first an advantageous foreign exchange of his produce than he could if he set himself to produce the goods which are imported. If not, it would clearly, in general, pay him better to produce those goods adding to the capital which he already uses at home that which is employed in foreign trade. There is a similar failure also to state the grounds for the proposition that, in general, export of capital will not exceed what is advantageous to a nation. There is a presumption that *ceteris paribus* the higher the interest the greater the total dividend shared among the society. We have indeed to take account of distribution which is *primâ facie* affected adversely to non-capitalists by whatever tends to raise or maintain the rate of interest. Against this may be set, as in the case of new openings for capital at home, the consideration that an increase of saving will attend the higher rate of interest, and that the dividend will be still further increased to the ultimate advantage of all classes. The elasticity of the supply of capital is an unknown quantity, but it may surely be concluded that the attempt to transfer to home industries any considerable proportion of our foreign investments would result in such a fall in the rate of interest as to check saving appreciably. And it must be remarked further that although no unit of our foreign investments yields directly more than the interest obtained, whereas of our home investments all but the marginal units yield an additional advantage, yet indirectly we benefit greatly by the opening up of new countries with British capital. This last statement must, it is true, be qualified by the admission that the development of foreign industries may be detrimental to us as soon as they begin to compete with us in their own or in neutral markets. But nations which have reached that degree of industrial expansion are substantially independent of British capital, and, indeed, compete with our investors in more backward countries.

* The discussion which follows of the exceptions to free trade admitted by Adam Smith contains much with which all modern

economists agree. It is, however, as I think, coloured throughout by the earlier omission to state precisely the shortcomings of Adam Smith's views on the different employment of capitals. We shall take a very different view of the possibility of increasing net investment alike in the United Kingdom and in the Colonies according as we do or do not supplement the doctrine of Adam Smith with the doctrine of the margin. In the former case we shall be apt to fall into dreams of transferring, by means of small additions to the rate of interest, a very large proportion of our capital invested abroad to domestic or imperial employment. In the latter we shall recognise that the transferable proportion will be small, a loss to the national dividend presumable, a gain through a better distribution of the dividend problematic.

In his statement of the negative argument for free trade, Professor Nicholson perhaps attaches too little importance to the difficulty of basing scientific protection upon mercantilist propaganda. He seems to assume that the *via media* which he preaches would cure the crude fallacies alike of free traders and of protectionists, but the example of the neglect by tariff reformers of Professor Ashley's proposals for the scientific resistance of dumping is the reverse of encouraging. If we must assume the continuance of crude argument on either side, the case for free trade is strengthened enormously. Non-intervention, though it prevents us from making the gains of well-devised duties, protects us at least from the losses of ill-devised duties. The strength of free trade, as Dr. Marshall¹ has well pointed out, may lie not least in the fact that it is the absence of a device.

I have not refrained from expressing my opinion that in his desire to do ample justice to the case for protection Professor Nicholson has in some particulars understated the case on the other side. At the same time, I see no justification for the view expressed by journalistic critics, notably in the *Manchester Guardian*, that the book is antagonistic to free trade. Considered merely as an exposition of the views of Adam Smith, and apart from its value as a contribution to a great imperial problem, Professor Nicholson's work will be welcomed by all who put truth above party. A most admirable feature of the book is the swiftness and delicacy with which it substitutes for the conventional Adam Smith the picture of a personality warmed by patriotism, inspired by prescience, with a burning hatred of selfish interests and incompetent governments, refusing to admit the word "impossible" in the vocabulary.

¹ Fiscal policy of international trade. § 44.

of his politics. Something of this mantle has descended on Professor Nicholson as he wrote. I thrilled especially over his discussion of the difficulties involved in the establishment of imperial free trade. He is, I believe, the first writer who has had the courage to tell the simple truth. "The most formidable difficulties are not founded on facts, but on opinions, and opinions may be changed. In the forefront there is the idea of impossibility; and so long as statesmen are content to repeat, one after the other, that a thing is impossible, it is *ipso facto* impossible. It will cease to be impossible as soon as it seizes the imagination of a great colonial leader of the order that believes in a thing because it is impossible." These are great words, and the whole temper of Professor Nicholson's work is a splendid vindication of the truth that free trade is not incompatible nor protection identical with patriotism. I confess, however, to a regret that he should have condescended so far as to speak of Adam Smith's cosmopolitanism in a minimising and almost apologetic strain. It is, of course, true that he was not cosmopolitan in the sense in which that term is used in political controversy. But that he was cosmopolitan in the honourable sense, that he desired his country to contribute as much as possible to the general good of humanity, seems to me equally certain. His common sense told him that in practice the best way to serve humanity is to serve one's own country, precisely as, generally speaking, the best way to serve one's country is to pursue one's own interest. That he was as fully alive to the imperfection of the rule of national as of the rule of individual interest is shown very clearly in a passage (quoted in another connection by Professor Nicholson) on the relation between Europe and the East: "Hereafter, perhaps, the natives of those countries may grow stronger, and those of Europe may grow weaker; and the inhabitants of all the different quarters of the world may arrive at that equality of courage and force which by inspiring mutual fear can alone overawe the injustice of independent nations into some sort of respect for the rights of others." In face of such a passage it will not do to suggest that Adam Smith comes up to the standard of patriotism imposed by some of those to whom this book is addressed. H. O. MEREDITH

The Disappearance of the Small Landowner. Ford Lectures, 1909. By ARTHUR H. JOHNSON. (Pp. 164, with three maps. Oxford: Clarendon Press. 1909.)

HERE is a noteworthy addition to economic history. It combines a judicious summary and review of the available modern

literature for the whole of English agrarian development, from the Middle Ages to the present time, with the results of a new and original investigation, based on hitherto unused materials, into the last two centuries.

Let us take the quite independent and fresh work first. It occurred to Mr. Johnson, by a happy inspiration, that the Land Tax assessments, if only he could get hold of them, would enable him to trace all the changes in the ownership and occupation of land for the period they covered. His anticipation proved to be correct. The returns, indeed, are for some counties fragmentary, and for some difficult of interpretation; and, worst of all, none so far have been unearthed prior to 1716. But the mass of material is so great that it is quite possible to draw large general conclusions from them; and there fortunately exist for a good many parishes a number of Tudor and early Stuart surveys, with which Mr. Johnson has been able to compare the eighteenth-century assessments. He tells us that up to the present he has been able only to analyse the assessment returns for some 500 out of the 15,000 parishes in England; but these cover a wide geographical range, and the generalisations they suggest are confirmed by the accounts which Mr. Johnson's diplomatic inquiries have elicited from half a dozen great landowners as to the historical development of their several estates. Mr. Johnson's conclusions are as follows:—

(1) "There was a very remarkable consolidation of estates, and a shrinking in the number of the smaller owners, somewhere between the beginning of the seventeenth century and the year 1785, more especially in the Midland counties." (Page 132.)

(2) "There is some evidence that the really critical period was somewhere after 1688." (Page 135.)

(3) And here is Mr. Johnson's most surprising result, and one which must in future be borne in mind in modification of the statements of Toynbee and Mantoux: "During the period 1785 to 1802 there was an increase rather than a decrease of the yeomen proper in all parts of England, except those like Lancashire which were more directly and rapidly affected by the industrial revolution; and, if there was consolidation of property among owners who did not farm their lands, this was rather at the expense of other owners or squires than of yeomen." (Page 144.)

(4) "From 1802 to 1832 there is a different tale to tell"; and "from 1832 to 1862 the fall" in the number of yeomen or occupying owners "still continues." (Pages 144, 145.)

(5) Between 1862 and 1892 the movement seems to have been different in different parts of the country.

(6) "After 1892 the worst seems to have been passed, and between this year and 1907 the returns seem to indicate a general improvement in the condition and numbers of the small land-owner, though that improvement is neither universal nor great." (Page 147.)

These conclusions are, of course, only provisional, and future investigators may modify them in certain particulars. And opinions may differ as to the causes and as to the social significance of the changes indicated. But it is clear that Mr. Johnson has set economic historians on the right lines of investigation. And it is equally evident that the due interpretation of economic history involves a quantitative measurement of the phenomena to be considered. In several directions attempts are now being made to apply statistical methods to economic history—not always indeed with success, for the besetting temptation of the statistician, to lose a perception of the nature of the figures in the pleasure of manipulating them, presents itself here as everywhere else. From this fault Mr. Johnson's work is conspicuously free; and this section of his book is a happy and—let us hope—fruitful example of statistical method properly employed.

And yet I do not know whether the earlier lectures in the volume are not equally valuable, though in a different way. It is so easy to be biassed, even in writing the agrarian history of the Middle Ages and of Tudor and Stuart times! Pro-Mark system or anti-Mark system, pro-Reformation or anti-Reformation, pro-landlord or anti-landlord, a tendency to magnify or a tendency to minimise, a tendency towards symmetry or a tendency to deny the very existence of the "typical"—any one of these feelings may unconsciously warp the judgment. As far as I can see, Mr. Johnson avoids all these dangers. He is not only well-informed and careful; he is judicial and fair-minded throughout.

I have neither space nor time to give an abstract of Mr. Johnson's narrative: all who are interested in the subject will naturally go to the book itself. But there are one or two matters to which I should like to call attention, both because they illustrate the author's dispassionate and level-headed attitude, and because they are subjects on which it is possible, I think, to carry the argument just a little further than he has taken us.

First, then, as to the extent of the enclosures of the Tudor period. Mr. Johnson reproduces the careful estimates of the very

competent American scholar, Mr. Gay, which are based upon the Inquisitions of Depopulation, and makes them more telling by turning the county percentages into a map. But he is careful to point out—as indeed does Mr. Gay—that our evidence can hardly be regarded as complete. From what we know of the circumstances of the case, and from what Hales tells us of the packing and terrorising of juries, it is certain that some enclosures, at any rate, escaped being presented. Moreover, as Mr. Gay has also noticed (*Quarterly Journal of Economics*, August, 1903), “the statute of 1490 took no account of decay associated with less than twenty acres.” Accordingly Mr. Johnson very wisely only claims for his map that it shows “the *relative* amount of enclosure in various parts of England.” (Page 48.) For that purpose it is certainly most useful: it makes visible the geographical relations of the several districts affected as no table of figures could do, and brings out the capital fact that enclosure was mainly a problem of the Midlands.

Mr. Johnson does well not to be carried too completely off his feet by Mr. Gay's figures. For I cannot help thinking that, with all his care, Mr. Gay has gone almost as far in creating an unduly minimising impression as the preachers and pamphleteers went in the direction of exaggeration. “An agricultural change affecting 2·76 per cent. of the total land area of twenty-four counties in a century and a half is surely nothing very alarming,” says Mr. Gay. But is the proportion of enclosed land to “the total land area” a suitable measure of the justifiable alarm? The question is not of the proportion affected of the total land area, but of the proportion of the total *tilled* area. It is, I suppose, matter of common agreement that the enclosures presented by the Tudor juries were enclosures almost entirely of arable land. But very many manors had a considerable area of waste land. How much allowance should be made for this before we begin to construct percentages to represent the reasonableness of alarm, I should not now undertake to say; but evidently the consideration cannot be neglected. And even more important is the fact that in Tudor times large stretches of country were still forest, and forest not only in the legal sense but also very largely in the popular sense of woodland. According to Mr. Gay's figures, the counties most affected by enclosure were those of Warwick, Leicester, Northampton, and Rutland, and for these he estimates an enclosed percentage of 8·91. He has himself, however, noticed that much of Warwickshire was occupied by the forest of Arden. Accordingly, Mr. Johnson, in his map, only

extends the blackness of 8.94 to the south-eastern third of Warwickshire. But I do not see that either Mr. Gay or Mr. Johnson has made any statistical allowance for this consideration. From Mr. Gay's own map in the *Harvard Journal*, marking the villages or manors actually affected, it is at once seen that enclosures were sparse in the north-west part of the county. And if the enclosures in the portion outside the forest could be measured only against the county area outside the forest, the percentage would necessarily be considerably higher.

The same line of reasoning applies, though in a less degree, to Leicestershire and Northamptonshire. Thus in Leicestershire there was Charnwood Forest, according to Leland "twenty miles in compass," wherein was "no good toun nor scant a village"; and most of the northern end of Northamptonshire was occupied by the forest of Rockingham. If, even on the extant evidence, such as it is, we find some 9 per cent. of the total land area to have been affected by enclosures, we are pretty safe in supposing that this represented at least twice as large a proportion of the land actually under the plough. And though even one-fifth is much less than contemporary complaints led us at one time to suppose, it would be a good deal more "alarming" than one-tenth.

The second point to be noticed is with regard to the legal character of customary tenure. The present reviewer, almost twenty years ago, ventured to put forward a view of the legal position of customary tenants during the earlier enclosures, which, it must be allowed, has not yet met with general acceptance. He would himself perhaps state it somewhat differently to-day. But it has at any rate served a useful purpose by calling attention to a real problem. After a very complete and fair review of the subsequent discussion, Mr. Johnson now arrives at a conclusion which certainly represents a distinct step forward in our knowledge of one very important part of the subject—viz., the law as to succession to copyhold tenements. "No sooner has the copyholder gained legal recognition of his holding than the struggle begins on the question whether their tenures are true copyhold of inheritance or not." (Page 66.) That is a just statement of the situation; and Mr. Johnson's observation throws a flood of light on an obscure subject. But let us dwell a little further on this term, "a copyhold of inheritance." It was used by Coke in 1641 (*Complete Copyholder*, Section 49); but it is not clear that it was much older than his time: possibly Coke invented it. Mr. Johnson refers (page 69) to the very significant Statute of 1609 (7 Jac 1, cap. 21), "declaring that, where any

tenement on a royal manor has been established by decree of the Lord Treasurer . . . as a copyhold of inheritance, it shall thenceforth be so holden." But the citation is probably taken from a later writer, for the actual words of the statute are different, and more significant. The text (as given in the *Statutes of the Realm*, iv., Part 2, page 1180) runs thus: "Be it enacted that all the Messuages . . . decreed to be from henceforth *good and perfect Copyhold Lands* shall . . . be taken and adjudged to be *good and perfect Copyhold Lands*, Tenements and Hereditaments . . . and that all persons shall . . . have, hold, use and enjoy the same Messuages . . . to them their Heires and Assigns for ever." Modern writers have been too much inclined to lump all "copyholds" together, and to speak as if what was true of one copyhold was true of all. But it is becoming clear that "copyhold" was originally a somewhat elastic term, and that it took some time for the classification into *heritable* and *for life or lives* to be distinctly formulated and consciously applied to every separate holding. There is some reason also for believing that, in the middle of the sixteenth century, copyholds *for life or lives* were regarded in some quarters as the normal copyhold tenure. There is a curious statute of 1548 (2 and 3 Edward VI., chapter 12. *Statutes of the Realm*, iv., Part 1, 54) with regard to certain lands of the Duke of Somerset. It appears that his stewards had made "many demises, leases and grants for term of life or lives," and by copy of court roll, of certain "demesne lands, barton lands, over lands or bord lands." These had been granted "in like manner, form and condition, and *with like and the same customs, usages and liberties, benefits, commodities and privileges as the ancient and customary tenants and copyholders of the old customary and copyhold lands of the . . . Honor and Manor.*" These demises being invalid, "by reason," as the marginal abstract says, "that such demesne lands were not old customary or copyhold lands," a special statute was now passed confirming "all leases and grants made or hereafter to be made by Copy of Court Roll, *for term of life or lives*, not exceeding three lives at the most"; and again it is expressly said that such tenants "shall have and enjoy all such like lawful customs, liberties, usages and advantages . . . as the ancient and old customary and copyhold tenants of the . . . Honor or Manor."

• "But," as Coke himself says in one place, "I perceive myself rashly running into an inextricable Labyrinth; I will therefore sail no longer in these unknown wasts, but will hasten homewards." To the economic historian the exact legal position of

the customary tenants during the enclosures is a matter, after all, of only secondary interest. The prime fact for his purpose is that a number—and we are now getting a more exact notion of the number—of customary holdings did actually disappear. A secondary fact, of a different order, is that during that same period the law of copyhold tenure was in process of formation. And it would seem *prima facie* probable that the movement of enclosure was facilitated in its earlier stages by the inchoate state of the law. But the development of the law is a matter for the legal historian. The prospects of advance in that direction are much more hopeful now than they were twenty years ago; for Maitland has meanwhile placed the idea of evolution in a far more dominating position in legal studies. Even to a layman, who has only looked through a few *Complete Copyholders* and *Court-keeper's Guides*, it is apparent that what is now wanted is for some legal historian of the Maitland school just to work through the recorded decisions of the courts, together with the various recorded local settlements, of the period 1400–1700, in an entirely objective and severely chronological fashion.

In his last chapter Mr. Johnson draws a comparison between England and other countries. He is inclined to think that “the peasant proprietor is declining in numbers on the continent of Europe,” and that “the fabric of rural society is undergoing the same process of disintegration as England first underwent at the close of the fifteenth century.” But these are somewhat of the nature of *obiter dicta*; and Mr. Johnson does not suggest that they are based on anything like the same wide range of evidence as his historical conclusions for England. The position of the peasant proprietor, in France, Germany, and Russia alike, is at the very centre of social controversy: it holds, for instance, a most important place in the debate in Germany between the Marxists and the Revisionists. It is perfectly possible to get the most diverse judgments from equally honourable writers; and it behoves the English reader to be particularly cautious as to the authority he follows. The figures for the last Occupation Census of Germany are not yet, I believe, available; but we may remember that, according to the census of 1895, while the *petty* holdings slightly decreased between 1882 and 1895 in number and total area, the peasant farms of from five to fifty acres increased in both respects, and occupied in 1895 1·26 per cent. more of the cultivated area than at the beginning of the period. As Dr. David, the well-known Socialist authority on agriculture, felt bound to declare, in the teeth of the *a priori* anticipations of his Socialist

colleagues, "The peasant properties which made headway were precisely those which were big enough, and not too big, to completely occupy and maintain a family."

So far as we can judge from the local reports sent in on the occasion of the Paris Exposition of 1900 (from which some extracts are given in M. Gide's *Economie Sociale*), the middle-sized peasant properties are maintaining themselves, or even gaining ground, in France, and it is chiefly the holdings which are too small to support a family that are here and there disappearing. However this may be, it is well that we should be invited to make the comparison; for English history has long been too narrowly Anglican. We want two things in historical work: the presentation of large new facts and the statement of new problems; and in this excellent book Mr. Johnson gives both.

W. J. ASHLEY

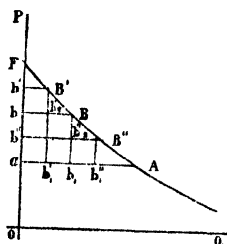
Cours d'Économie Politique professé à l'École Nationale des Ponts et Chaussées. Par C. COLSON. Livre Sixième: Les travaux publics et les transports. (Paris: Alcan. 1907. Pp. 527.)

THE sixth and last volume of M. Colson's Course may properly be made the object of a separate review. It is distinguished from the preceding volumes in that the greater part of their contents has appeared in earlier editions. Besides, it is not only the conclusion, but also the final cause of the whole work: "Ic but en quelque sort," says the author, "de tout le Cours." It is the crowning height to which the preceding parts lead up by a magnificent gradation. The reader must tread the greater part of this ascent by himself. We can only offer guidance at the first stage. The first volume calls for some notice here so far as it bears upon the volume that is under review.

A reader who, having some previous acquaintance with the economics of transportation but not with M. Colson's earlier volumes, should take up the last one, might be surprised at the absence of reference to the literature of the subject. In particular he would desiderate grateful allusion to one of the author's predecessors in office, and studies connected with the *Ponts et Chaussées*, the illustrious Dupuit. This reticence is justified, or at least acknowledged, in the introduction to the whole Course, where the author, referring to the diversity of economic schools, says it has been his object to present the leading common features without entering into the details of quotation and reference. "I

have refrained," he says, "almost entirely from bibliographical references, which fill so large a part of modern works; if they are to be given with sufficient fullness and precision, to be used for the purpose of indicating the part played by each earlier writer in the successive elaborations of a doctrine, it would be necessary to devote to references an amount of space which would have entirely exceeded the limits of this work."

Apropos of M. Colson's French predecessors, the English reader may like to be reminded that he employs Supply and Demand curves differing in one slight particular from those which Dr. Marshall has made familiar. The abscissa measured on the horizontal axis (usually designated by $O \cdot X$), represents, in the French system, the price, not the amount of commodity which is offered or demanded at a price. Since the abscissa is by a general convention usually employed to represent the independent variable, the Cournot-Dupuit-Colson system may seem preferable, so far as the amount demanded or supplied depends upon the price. But when, as in the case of Dr. Marshall's "long-period" supply curves, the price (or range of prices during a short period) is considered as changing with the scale of production, there is a certain propriety in regarding the amount as in some sort the independent variable. We have taken the liberty of turning one of M. Colson's diagrams through a right angle, so that the English reader may more readily apprehend the author's reasoning:—



One important argument relates to the case in which a monopolist, instead of charging a single price for a whole class of commodities, charges different prices for different species thereof.

"Let $O b$ be the single price which would bring to its maximum the gain of the monopolist, represented by the area $B b_1 a b$ [$O a$ representing the cost of production of a unit of commodity]. Suppose that while maintaining this price for the purchaser who cannot pay more, the monopolist makes a higher price $O b'$, and manages that it should be paid by those purchasers only who have a demand for the commodity at this price, the amount demanded

being $B' b'$. The monopolist's gain¹ is increased by the rise of price paid on this amount of commodity; his gain is then represented by the area $B b_1 a b' B' b_2'$. The Purchaser's Rent [corresponding to Dr. Marshall's Consumer's Surplus] is reduced for all those who pay the price $O b'$ and purchase at this price the quantity $B' b'$ to the curvilinear area $B' b' F$. The surplus for those who could not pay the price $O b'$, and continue to purchase the quantity $B b_2'$ at the old price, $O b$ is represented by the area $B B' b_2'$. The total utility afforded by the monopolised industry after the expenses of production have been paid for, formed by the addition of the monopolist's gain to the purchaser's rent, remains what it was, equal to $B b_1 a F$. If now the monopolist makes a third price $O b''$, lower than $O b$, and manages that it should be paid only by the purchasers of the amount $b_1 b_1''$, which corresponds to the increase of demand due to this lowering of price, it appears that his gain on his increase of sale is represented by the rectangle $B'' b_1'' b_1 b_2''$. The purchasers who pay the price $O b''$ for the goods which they would still find it for their advantage to buy if they could not obtain them otherwise for prices between $O b$ and $O b''$ benefit by a surplus represented by the area $B'' b_2'' B''$ (Vol. I., p. 223).

There is thus brought out the important fact that a monopolist, by charging two (or more) prices, can benefit at once himself and his customers. This result is obtained by getting rid of the dead loss (*perte sèche*) incident to a single price, represented by the area $B b_2' B''$ in our figure; a loss to the consumer which is no gain to the monopolist.

This proposition remains true when the monopolist is the State. There is, indeed, a peculiarity in the exercise of monopoly by the State as compared with the "economic man" or company. It is open to the State, by aiming at a point a little below that which affords the maximum of profit, to confer a considerable benefit to its customers with very little loss to itself (Vol. I., p. 220; Vol. VI., *passim*). There is here involved the important principle which has been thus enunciated in the ECONOMIC JOURNAL. "A small change of an economic variable quantity at the margin commonly causes a *very small* change in the corresponding surplus." The priority in the application of this principle to Economics seems to belong to Dupuit.¹

Our limited space does not permit us to dilate upon many topics of great interest, such as the elegant illustration of the way in which general expenses—met by tolls (*péages*)—influence the character of competition (Vol. I., p. 230), the analysis of the

¹ See ECONOMIC JOURNAL, vol. xviii, p. 400; and compare Dupuit, *De la Mesure de l'utilité des travaux publics*, *Annales des Ponts et Chaussées*, 1844, vol. ii, p. 370.

entrepreneur's functions (pp. 269-273), the use of what some call *a priori* probabilities to show that the continued coincidence of supply- and demand-curves is incredible (Vol. I., p. 308). That sort of probability is (in effect) again employed to estimate, in the absence of precise data, the advantage obtained by consumers from a fall in price (Vol. VI., p. 203).

The principles established in the first volume are applied in the sixth to Public Works. As we understand the definition of this term, the essential attribute is an absence of competition which necessitates the intervention of Government; and the differentia is the economic character of the service admitting of measurement by money. Railways and some other modes of transportation come under this category in that they require the sanction of the State—a "private Bill" at least in England, if not a "concession," as in France. The masses of knowledge, marshalled skilfully under leading principles, which M. Colson brings to bear on this subject, cannot be adequately passed in review. A desultory inspection is all that we can attempt.

I. The principles which govern the price of transportation—fares and freights—are first discussed. If all roads were like the waterways of the ocean, a gift of Nature, the price of transportation would nearly correspond to the prime, or "partial," cost of production. But, in fact, a considerable part of the price consists of tolls, whereby the cost of constructing the roads is compensated. The question is raised, whether the State ought to defray this part of the price. Certainly not, when the service benefits only some particular locality. But so far as the use of a general railway system is common to the community, it is not unreasonable that the community should contribute to its construction. Conversely, it is not unreasonable that tolls paid by the travelling public should be employed to relieve the general taxpayer. Whatever shares of the total utility (Monopoly Revenue + Consumer's Surplus) may be assigned to the travelling public and the tax-payer respectively, the one important condition is that the total utility should be maximised by adapting prices to what each category of the traffic will bear. But M. Colson is well aware that it is often difficult to carry out this precept perfectly; to charge, for instance, a different freight for lime according as it is destined for agriculture or building purposes, if that is a case in which the destination can only be known by the declaration of the customer—the "destinataire."

II. Statistical fact follows on economic theory; and in the second chapter we are presented with figures and diagrams

showing the extent, growth, receipts, expenses, charges of the roads, canals, harbours, railways in the principal countries of the civilised world. The relations between the State and private enterprise in the different countries are exhibited; in particular, the transactions between the State and the railways in France, a complicated subject, which not even French lucidity can render attractive to the general reader.

III. To measure the utility of improvements in transportation is interesting with respect to progress in the past, and useful with respect to projects for the future. The direct and main cause of increased advantage is diminished cost. The statistics adduced in this connection, showing the cost of various kinds of transportation, cannot well be reproduced in a summary. One difficulty is caused by the great discrepancy between extreme and mean prices. For instance, transport across the Channel costs several centimes per ton-kilometer, while the charge for the same unit of transportation in a sailing ship over distances exceeding 20,000 kilometers might be some fraction of a *millime*. Another difficulty illustrates the composition of "toll" and "partial cost" in the charge for transportation by rail. The average charge per train-kilometer in France is 2 francs 34 centimes. "But if we inquire the expense caused by running an additional train, within the limits of elasticity constituted by the organisation of the service, without increase of the *personnel* in the stations, we may estimate it as between 1 and 2 francs," according to the circumstances. So in the opinion of many experts, the cost of the passenger service is such as to leave the companies very little profit. But this is not to say that the "partial cost" of production for one passenger more is not much less than what he has to pay. Reduction of cost, as we understand, is the cause rather than the measure of advantage. Thus the annual turnover of the railways and tramways of the world may be estimated at 30 milliards (£1,200,000,000); the transportation thus accomplished, if effected by road, would perhaps represent an expense of 150 milliards. But we cannot measure the benefit procured for the public by the difference between these figures. Over and above the direct benefit, of which Purchaser's Surplus affords the correct measure, there is a stimulus to industry, a succession of beneficial consequences accumulating like a snowball. But this indirect benefit affords no ground for maintaining at the cost of the taxpayer an enterprise which cannot defray its cost of production. Against the encouragement to industrial customers we must now set the discouragement to the industry of the taxpayer,

a negative snowball of accumulating detriment. The indirect benefits are commonly exaggerated by the projectors, who clamour for Government assistance—like that one of Molière's *bores*, who, in order to increase indefinitely the King's revenue, proposed: "En fameux ports de mer mettre toutes les côtes."

IV. Under the head of *Systèmes Généraux de Tarifs*, M. Colson considers different kinds of discrimination. In the discussion of this and other topics, he has been largely anticipated by one English and several American writers. But even their readers may have something to learn from our author as to the methods of classification, and the variation of charges according to distance, practised on the European Continent. Competition is another circumstance producing diversity of tariffs. The two species designated by Professor Ripley as competition between routes and commercial rivalry, are classed by M. Colson as "*prix fermes*." He includes in the same category the case in which a railway lowers its freights to encourage consumption.

V. Comparing competition and combination, M. Colson is in accord with all high authorities in ruling out unqualified *laissez faire*. Discussing competition between railways and other modes of transport, he severely condemns the partiality with which the subvention of the State is employed in France to exempt canals from tolls, to the prejudice of the railway companies and of the public.

VI. If some Governmental interposition in "public works" must be admitted, what form should it take: operation or control? Our author inclines strongly to the latter alternative. He argues that Governmental management is more expensive, and has less elasticity in the variation of charges according to what the traffic will bear. The political abuses to which State operation would lead in France form the decisive argument against this *régime*. In the exercise of its control the State may properly insist on new constructions and other improvements being made by railway companies; provided that the companies are guaranteed against the risk of the enjoined outlay proving unprofitable. Here, again, we come in sight of the important principle that a small loss to the monopolist may be a great gain to his customer.

VII. The best method of securing co-operation between the controlling and the controlled parties, "*le concédant et le concessionnaire*," is a financial association. The golden rule for securing coincidence of interest between the financial partners is that the company should not be called on to make an outlay which exceeds its share of the resulting receipts. On this principle, not,

rather than gross, receipts should be divided between the parties. The rule is sufficiently well carried out in the arrangement between the State and the larger companies in France. But it is otherwise when, as in the case of the smaller companies, it becomes necessary to substitute for the account of actual expenditure computed on conventional amounts. The formulae adopted in practice for this purpose are of extreme complexity, presenting, when expressed in mathematical form, a fearful jumble of symbols. Yet, after all, the main conditions for a "formula of exploitation" are not satisfied. M. Colson proposes a simpler and doubtless more effectual formula for the constructive expenses of railway traffic. This "three-term formula" is of the type $a + b R + c T$; where a represents general expense independent of the amount of traffic, R is the actual receipts, b is some proper fraction, T denotes the number of train-kilometers (*le parcours kilométrique des trains*), c a fraction of the mean cost of an additional train-kilometer. For instance, if that additional expense is about sixty centimes, then putting for c *three-quarters* of that mean cost we might have for D the constructive expenditure (in francs):—

$$D = 800 + \frac{R}{4} + 0.45 T.$$

If the Company increases the train-mileage by an outlay of 60 centimes per kilometer, and the receipts exceed the outlay, the Company will regain more than they have spent—three-quarters of the expenditure in virtue of the third term of the formula, and more than a quarter in virtue of the second term. On the other hand, if the receipts fall short of 60 centimes, the Company will have no interest in making an expenditure which is unprofitable to the community.

VIII. From Transportation our author goes on to the other kinds of Public Works, such as the distribution of water and gas. But we have said enough to excite the interest of the reader. We could not by a continuation of disconnected extracts convey an adequate impression of the work as a systematic whole. "Disjecti membra poetæ" cannot represent an epic.

F. Y. EDGEWORTH

Socialism and Government. By J. RAMSAY MACDONALD. M.P. (London: Independent Labour Party. 1909. Two Vols. Pp. xxxii + 167 and xiv + 162. Price 1s. paper, 1s. 6d. cloth, each vol.)

"SOCIALISM will be led again and again into quagmires unless it harmonises its politics with its sociology, and unifies its

theories of political and industrial organisation." This unification is Mr. MacDonald's principal aim. He pursues it rather by way of criticism of Socialists' views of political organisation than by way of criticism or examination of their views on industrial organisation, and this fact takes the bulk of his work outside the sphere which, however narrow the ignorant may suppose it, is quite big enough for a quarterly economic journal. The economist as a man and a citizen will find much of interest in Mr. MacDonald's reasons for disapproving of the Second Ballot, Proportional Representation, the Referendum, and a Second Chamber, and his reasons for approving Women's Suffrage, but *quâ* economist he may leave the mechanism by which the will of territorial societies are expressed to the politician, if we may be allowed to coin a useful word. He has plenty to do in considering the economic results of the decisions arrived at by the help of that mechanism, whatever its precise nature may be.

In politics Mr. MacDonald is inclined to see so much good in existing institutions that he would rank as a very good Conservative, if that word was used in its original signification. This makes it rather surprising that he sees, or at any rate speaks as if he saw, no good at all in existing economic organisation and something worse than no good in the economic organisation of seventy years ago. But perhaps we ought not to be surprised, since he calls himself a Socialist, and the true shibboleths, not of Socialism as the word is used by those who are not Socialists in any sense, but of Socialists who are willing to be called by that name; are "chaos" and "capitalist anarchy." The state of mind indicated by the application of these terms to the existing machinery and by the talk of the past "*laissez-faire* period" which usually accompanies it seems just as wanting in the true historical spirit as the "individualism" which involved a belief that "liberty" and "property," pretty nearly as they happened to be defined in English law at the moment, were natural institutions good for all times and places, and must inevitably, if only allowed to work without "interference," produce the best possible economic conditions. The economic institutions of the present require alteration not because they are fundamentally "bad," but because the circumstances are continually changing, and institutions, economic just as much as political, must be appropriate to the circumstances.

Perhaps, however, it does not make much difference whether we regard existing institutions as finding employment for between

90 and 100 per cent. of the able-bodied, and more or less adequate subsistence for 99 per cent. of the population, or regard them as refusing employment and subsistence to the remainder. It may be said to be only a difference of emphasis, which affects general expositions of theory a good deal more than practical measures. This is true with regard to a great part of the social effort of the present time, but not with regard to the whole of it. Excessive hostility to existing arrangements leads to a too ready acceptance of a territorial collectivism which has in reality very little to recommend it. Certainly the municipal ideal of a few years ago, in which the world was conceived as reorganised on the basis of ownership by the "people of the locality" of the land and capital within each arbitrarily defined town and rural district, has no longer the hold which it had on many minds. The weak consent to surrender half the proposed new British land taxes to the localities may be said to testify that the ideal in question is not dead, but the fact that it was not at once decided to give the half-share to the localities in which the taxes were collected, and the fact that the German central authority is now putting in a claim upon increment taxes heretofore purely local, show that it is dying. But the municipal ideal has been succeeded by a national ideal which in principle is just as indefensible. An arrangement which tried to give the ground-value of London to everyone who chose to live within the county, or the ground-value of the Witwatersrand to everyone who chose to live in Johannesburg would no doubt be more disastrous to the welfare of mankind than an arrangement which gave these properties to the people who chose to live in the United Kingdom and the Transvaal respectively: but the two arrangements have the same fault of inevitably causing an uneconomical distribution of population. They would both lead to the overpeopling of the portions of the world which are highly endowed by nature and the underpeopling of those which are poorly endowed. Thoughtful Socialists like Mr. MacDonald would do well to face the fact that they regard the distribution of population now existing as very nearly right from the point of view of mankind as a whole: they may quite justly think there are too many people in Whitechapel as compared with South Kensington, but none of them really think that London ought to be in Galway. They say that Ireland ought not to have been depopulated, but they do not say or think that the West of North America should not have been populated directly and indirectly by the Irish emigrants. The territorial ideal of Socialism has hitherto provided no intelligible substitute

for the forces which at present regulate the distribution of population, and yet its exponents seem to assume that the distribution will continue approximately as at present after the existing forces have been removed. They are consequently as much in the air as the disputants on both sides of the fiscal controversy, who assume that the growth of population is quite independent of fiscal policy, so that England would have had just as many inhabitants if the Corn Laws had continued without alteration and France just as few if she had adopted Free Trade. Socialism, to become up-to-date, must somehow manage to slough off feudalism and provide us with an ideal based on something more substantial than place of residence.

EDWIN CANNAN

Darwinism and Modern Socialism. F. W. HEADLEY, F.Z.S.
(Methuen. 1909. Pp. 342+xv.)

SINCE there are still many people who are not clear as to the primary meanings of individualism and collectivism, it is doubtless desirable that there should be popular books to enlighten them. Mr. Headley has set forth to supply one of these expositions, confident that the errors of Socialism must "of course" be made manifest thereby.

The thesis of the book is that a struggle for existence is and must be a permanent condition of progress among men and States, as among plants and animals. If life is made too easy for individuals, they degenerate; if a State is too prosperous, it loses in patriotism and solidarity. The need for self-defence explains the prolonged existence of early forms of communism; a rather lengthy description of the mir and of manorial life illustrates this. But the same reason will not apply to the Socialism of the future, which is to take effect on a large scale, if at all, and must deaden competition between individuals and localities. Governments have not shown themselves capable of extended control of industry; and in different chapters the author sketches briefly the lack of balance in national and municipal administration and expenditure. Character, not circumstances, really affects a man's position in life; therefore limit capitalism by more factory acts and land laws if necessary, so that character may have more scope for expansion. It is not easy to criticise such a book, which, within its own necessary limits, is well done. It is a vigorous colloquial reply to ordinary Socialist views, giving a certain amount of historical and scientific background to the

picture of the modern State. The author bears lightly on a great number of topics, in a way that the convinced Socialist might feel to be superficial, and his assurance on difficult problems, such as the feeding of school children, adds perhaps unnecessarily to this impression. But his treatment is fresh and original, and supplies a very sensible answer to popular arguments.

C. V. BUTLER

Das philosophische-ökonomische System des Marxismus. Von DR. EMIL HAMMACHER. (Leipzig: Duncker and Humblot. 1909. Pp. xi+730.)

A CERTAIN professor of economics at one of the German universities insists that all his students shall be acquainted with the *Capital* of Karl Marx. The professor in question is not by any means a Marxist, but his reason is that he believes, and rightly believes, that one can learn a great deal of economics by a thorough mastery of the great work of Karl Marx. Marx, however, is difficult, and very often contradictory. It is necessary, therefore, to have a guide. Dr. Hammacher has done a great service to all students by the publication of his book, which deals not only with *Capital*, but with the whole system of Marxian doctrine, and deals with it in an exhaustive fashion.

If we were asked to characterise the book by one word, it would be "thorough." Dr. Hammacher gives evidence of an immense amount of reading, and his numerous extracts from the authorities he quotes add to the interest of the book. It is true that they help to swell the size of the volume, but on the whole we think that Dr. Hammacher has been justified by the result.

The book is divided into three sections. In the first, the author traces the genesis of the Marxian system, showing how much Marx was influenced in his philosophical views by Hegel and Feuerbach, in his economic ideas by Ricardo, and in his general outlook on social life by the industrial conditions prevalent in his day. Dr. Hammacher quotes with approval a letter of Lassalle to Marx in which the former speaks of the latter as "a Ricardo who has become a Socialist and a Hegel who has become an economist." He even sees the influence of Hegel on the later developments in the Marxian system. For just as the Hegelian metaphysics, from its very nature, grew into a right and left wing, so, too, Marxism split up into an orthodox and revisionist camp. In the same way, our author gives full attention to Engels, who

contributed no small share to the building up of the Marxian system.

What that system is, what its main characteristics, is dealt with in the second section as fully as one could wish. Nothing is left out. The special Marxian idea of work, the idea of productivity, the views on marriage and the family,^o and even the place of religion—all are discussed. Dr. Hammacher devotes special attention to three points: to the materialistic conception of history, to the idea of the social class, and to the theory of surplus value. In each case he considers his subject philosophically and historically; indeed, it is this two-sided treatment of every question that makes the book so valuable. There is nothing very new in Dr. Hammacher's descriptive account of these subjects, but his fullness is admirable.

It is in the third section of the book, where he criticises the whole Marxian structure, that he is at his best. This section extends to half the book, and contains many valuable contributions to learning. Dr. Hammacher criticises Marx adversely for his view that the struggle for existence is for material wealth. He holds that it is rather for power and distinction. Progress, in his view, does not come about merely as a result of the desire to satisfy physical wants. For all men are alike in their wish to have those wants satisfied. Progress is due rather to the desire of man to attain importance in his social group, to be distinguished in one way or another above his fellows. It is a mere assumption, therefore, to say, as Marx does, that the class war is due to economic causes. Like the individual, the social class struggles, not for material wealth, but for power. Furthermore, Dr. Hammacher holds that there is no reason for asserting that all history is no more than the history of class wars. This he works out at length, and the account is interesting reading.

As might be expected, Dr. Hammacher devotes much space to the Marxian theory of value, more especially to his theory of surplus value. The Marxian theory of crises also receives attention, and here our author admits that, on the whole, Marx is correct in his analysis of the causes of crises. Incidentally, he touches on points of great interest. He quotes chapter and verse (for example) for the view that Free Trade is part of the policy of the German Social Democrats, not because it is likely to help forward the Socialist ideals, but because, compared with Protection, it is the lesser evil. He praises Marx and Engels for having foreseen the trend of the "woman question," for having realised that the recognition of the equality of the sexes was only a matter

of time. And he draws a most interesting parallel between the views of Marx and Nietzsche! (Be it remembered that Nietzsche was one of the bitterest opponents of Socialism.)

We can heartily recommend Dr. Hammacher's book as an excellent study of the Marxian system. Despite the many criticisms of doctrine—criticisms which he ably supports by an immense amount of learning—he is yet sympathetic towards the Socialist movement, and holds that it is anything but Utopian. He is distinctly optimistic for the future. But let him speak for himself. "Mankind up to now," he says (and with this we conclude), "has not known how to put the riches it has gained to the best possible use. But he who has eyes to see and ears to hear can feel the new age approaching, with newer ideals that fall like the sun's rays on the heart of the present generation. We are tired of material prosperity, which our fathers made for us, and of which they were so proud. We want something else. We want a different kind of culture, which shall give life a new meaning. In the next age, Idealism will take the place of Materialism, and mankind will be healthier in body and soul."

M. EPSTEIN

Les Sociétés Co-opératives de Consommation. Par CHARLES GIDE, Professeur d'Economie Sociale à la Faculté de Droit de l'Université de Paris, &c. 2nd edition. Revised and with additions. (Bibliothèque du Musée Social. Paris: Armand Colin, 5 Rue de Mézières.)

M. GIDE's *Co-opératives de Consommation* is the equivalent of the English "Distributive Co-operation," the co-operation, that is to say, of which the initial step is the association of a group of consumers for the purpose of supplying their personal demand. Distributive co-operation thus starts from the consumer. Productive co-operation, on the other hand, begins with the association of a group of producers who aim at retaining to themselves the profits of their industry. Productive co-operation thus starts from the producer—and from one kind of producer.

But since every member of the public is a consumer, the first kind of co-operation can, without any change of principle or method, go quietly on until every civilised inhabitant of the globe supplies his needs through a co-operative store; while, since not every member of the public is a producer (there must be policeman, carters, tram-drivers, railway men, magistrates, teachers, doctors, inspectors, and civil servants), productive co-operation must

inevitably remain, even in its utmost development, sectional. The difference is the difference between Free Trade and Protection; and it is noteworthy that in England, where co-operation has reached its highest development, its rise begins to be perceptible soon after the establishment of Free Trade.

In France, which entered the co-operative field late, the movement has been divided, owing to the desire in some quarters to give it a consciously and avowedly Socialist character; while in Belgium the Socialist leaders deliberately organised distributive co-operation as a political measure. In Germany, where the earliest distributive society dates only from 1864, co-operation has made immense strides. As M. Gide says: "In that field, as in the industrial field, she aims at outstripping England; and at her present rate of progress it seems likely that she will succeed." Not improbably a slightly higher level of general education among the German working classes has made a larger proportion of them able to understand the principles upon which co-operation rests.

A particularly interesting chapter is that upon "Causes of Success and of Failure." First among difficulties comes that of finding the right manager; for "capable managers prefer to remain in the service of firms where they may find more security, more prospects for the future, and probably higher salaries." On the other hand, this country, at least, is beginning to produce a class of persons—a class that in the younger generation seems to be rapidly increasing—to whom no work is interesting unless its aim is larger than a mere personal one. A man of this type, if he happens also to possess business capacity, is the ideal manager of some co-operative enterprise; and English co-operation has attracted many such men. Possibly a greater acrimony of party divisions in France may tend to restrict the choice of managers; and this restriction may, in part, explain that smaller degree of success which M. Gide is inclined to attribute to racial differences.

Very important, again, to the success of a co-operative society is its environment. Hitherto co-operation has found most difficulty in establishing itself in capital towns and in country districts; while the soil in which it flourishes most readily is a population of regular wage-earners: a manufacturing or mining district of considerable size. Up to the present time, it is certainly true that "in the middle zone is found the chosen spot for co-operative societies." Neither the very poor nor the professional classes have been reached. The problem of co-operative provision for the poor must long remain a very difficult one, of which the solu-

tion probably lies not in bringing down co-operation to the level of the poor, but in bringing up the poor to the level of co-operation. As regards the professional workers, however, the time would seem to be ripe, in England at least, for an earnest attempt to enlist these in the main co-operative movement.

For the general reader not personally interested in co-operation, the most illuminating chapter is that headed: "The Struggle between the Co-operative Societies and the Tradesmen." Nowhere else has the whole position been so briefly and so lucidly stated. "Trading on a small scale appears to be definitely doomed by economic evolution as a form of defective and costly machinery . . . and the only question presented to-day is whether the co-operative society or the large shop shall take its place." . . . "In a word, it may be hoped that distributive co-operation will allow us to escape the alternatives that would else be imposed upon the consumer—either of continuing to bear the cost of an obsolete system like that of small trading, or of becoming the vassal of a commercial feudality."

M. Gide's volume is one to which no review can do justice. It is already compressed, and every extract loses by removal from its place; emphatically it is a book not to read about but to read.

CLEMENTINA BLACK

Salaire et Droit à l'Existence. Par J.-A. Ryan Professeur de Morale et d'Economie politique au Grand Séminaire de Saint-Paul de Minnesota, traduit de l'Anglais par Lazare Collin, avec une préface de Lucien Brocard, Professeur d'Économie politique de la Faculté de Droit à Nancy. (Paris: Giard et Brière. 1910. Pp. xlvii + 354.)

THIS book, of which a translation into the French is before us, is the work of an American Catholic, and deals with the question of a minimum wage from the Social-Catholic standpoint. The claim to this is based on the "right to live," and by it is understood a sufficiency to provide for an adequate standard of living (*existence convenable*). This attitude has much in common with that of the Socialists, yet is distinct from it; and this is shown in a very interesting preface by M. Brocard, who also traces the connection of the proposal for a minimum wage with the precepts of mediæval canonists. • •

The book itself is divided into four parts, of which the first contains a preliminary and historical survey of the subject. It

deals severely with the assumptions of the older economists—the wages-fund, *laissez-faire*, &c.—and briefly refers to the authorities that favour a minimum wage, from the fixing of wages by law, to the *Rerum Novarum* of Leo XIII. and the Trade Union claims. Then in the second book we get the actual claim outlined, under the title of “Base, Nature et Contenu du Droit.” The claim is one of right, though the equality of natural rights is not tenable in practice. It springs from the right to live upon the products of the earth, and is higher than that of private property. There is an interesting treatment in the third and fourth chapters of the question of a living wage for the individual and the family, respectively; and the part concludes with an attempt at a concrete estimate of what a living wage actually is.

The subject is continued in the first chapter of Part III. in, an inquiry into the number of workpeople in America whose wages do not reach the estimated rate. This part of the book, indeed, deals with the economic forces on which the payment of a living wage depends; and the author holds that the payment of such a wage would greatly increase industrial resources, for several reasons, including, first, the increased spending power of the mass of the population. The author then goes on to consider price, out of which “all the factors in production are paid.” and in considering how it is regulated, he criticises the “inexactitude” of the Socialist theory of Value. After this he considers in turn Rent, Profit (Minimum and Differential), Interest, and Wages. Profits are the reward of the *entrepreneur*, and interest has its justification in the increased productivity of capital.

But the “living wage” must take precedence of all other claims, even that of capital for a share in the increased productivity which it causes. “Une Société est obligée de payer un salaire permettant de vivre au dépens des dividendes.” This is the theme of the fourth and concluding part in “Les Obligations Correspondant au Droit.” This deals with the Employer (ch. i.), with the Lender of Capital, the Landed Proprietor, the Consumer, and the Rich (ch. ii.), with the Workman (ch. iii.), and the State (ch. iv.). It then concludes with Summary and Conclusions. There is a considerable list of books consulted, but no index. As already mentioned, the Preface, written by M. Brocard, is very interesting.

N. B. DEARLE

Women in Industry. A Study in American Economic History.

By EDITH ABBOTT, Ph.D. (New York and London : D. Appleton and Co. 1910.)

In this valuable contribution to the study of women's employment, Dr. Abbott has restricted her investigations to what are technically known as "industrial" occupations as distinguished from domestic, agricultural, commercial, and professional employment. Moreover, "the present study is not an investigation into present conditions of women's work and wages, but an inquiry into the history and statistics of the employment of women in America," with a view of examining properly certain fundamental questions. "How far is the gainful employment of women, either in the home or away from it, peculiarly characteristic of the nineteenth century? Has the growth of our manufacturing industries provided a new field for the employment of women? Or has there only been an increase in the opportunity for work in those employments which have long existed? And has the result of it all been that what was formerly 'men's work' has passed into the hands of women?"

To the English reader the answers to these questions, so far as they relate to the United States, are of less interest than the contrast afforded by the illustrations of old-world types in new settings given us in the earlier chapters of the book. In England the puritan and the hedonist have lived too near each other to escape interaction. In the Northern States of America in colonial days no conception of any joy in life seems to have existed except in the form of temptation, and from infancy onwards the one aim of parents and governors seems to have been to prevent Satan from finding any idle hands to do his work.

In the early days "the Puritan belief in the virtue of industry and the sin of idleness," which led to the active insistence on the employment of little children, does not seem to have been tainted by the paternal love of lucre which can be traced in the later records. Where barter prevails and labour is exchanged directly for labour, there is probably far less danger of children's energies being used to any unnatural extent. But, on the other hand, where all the elders are busily employed and overworked, a blindness to the beauty of childhood seems to develop itself. A chapter in the Appendix on "Child Labour before 1870" shows that throughout the seventeenth and eighteenth centuries the court records and province laws give evidence of the serious attempt made to prevent idleness among children. In 1641, in

Massachusetts, "it is desired and will be expected that all masters of families should see that their children and servants should be industriously implied (*sic*) so as the mornings and evenings and other seasons may not bee lost as formerly they have bene." For a child to "keep cattle" alone is not to be industrious in the Puritan sense, and it is decreed that such children as have this for their occupation shall also "bee set to some other impliment withall as spinning upon the rock, knitting, weveing tape, &c." The Great Law of the Province of Pennsylvania provides that all children "of the age of twelve years shall be taught some useful trade or skill, to the end none may be idle, but the poor may work to live and the rich if they become poor may not want." Virginia shows a worse record than the Puritan States, for "the London Company was not engaged in teaching moral precepts and its records indicate that child labour was accepted without any question as one way of developing the colony." A letter from England in 1627 relates that "there are many ships going to Virginia and with them fourteen or fifteen hundred children."

Whatever grievances women may have had in colonial days, it is clear that they could not complain that they were shut out from useful employment. "Perhaps the best expression of the prevailing attitude toward the employment of women at that time is to be found in one of the Province Laws of Massachusetts Bay for the session of 1692-93. The law ordered that every single person under twenty-one must live "under some orderly family government," but added the proviso that "this act shall not be construed to extend to hinder any single woman of good repute from the exercise of any lawful trade or employment for a livelihood; whereunto she shall have the allowance and approbation of the selectmen." The colonial attitude towards women's work was one of rigid insistence on their employment.

Dr. Abbott enumerates the occupations pursued by women in pre-factory days, and especially notes that the domestic servant in the seventeenth and eighteenth centuries was employed for a considerable part of her time in processes of manufacture and that one might well classify this as an industrial occupation. "A servant, for example, who was a good spinner or a good tailoress was valued accordingly, and advertisements in eighteenth century newspapers frequently mention this as a qualification." "Sewing and tailoring were standard occupations and were variously remunerated—one woman made 'shirts' for the Indians' at eightpence each, and 'men's breeches' for a

shilling and sixpence a pair, and in addition to this work of tailoring she taught school, did spinning and weaving for good pay, managed her house, was twice married, and had fourteen children."

The history of the transition period, to which Dr. Abbott devotes a chapter, has much resemblance to our own industrial history. Before power-spinning machinery was set up a practice had arisen of collecting yarn from the spinners in the homes, and having it woven in "manufactories" or rooms where several looms were gathered. The first cotton mill in which a complete set of the machinery necessary for spinning was successfully installed was established by Samuel Slater in Rhode Island in 1789, his operatives apparently being between seven and twelve years of age. Weaving did not become a factory occupation in the United States until after 1814, when the power loom was first used there. In the interval the great increase in the supply of yarn had created a new demand for weaving, and, as the use of the flying shuttle as early as 1788 had greatly lightened hand-loom weaving, women were more and more frequently employed as weavers, while—to quote a writer in 1814—"the male weavers employ themselves in superintendence, instruction, superior or other operations, and promote their health by occasional attentions to gardening, agriculture, and the clearing and improvements of their farms." As a result of the introduction of the factory system in the textile industries, "the work which women had been doing in the home could be done more efficiently outside of the home, but women were carrying on the same processes in the making of yarn or cloth. The place and conditions of labour had been changed, but women's work continued to be an important factor in the industry."

It is in the account of the establishment of the factory system in the United States that we begin to feel the absence of the Art-Socialist, who in one guise or another has always made himself heard in England wherever "industrial progress" has laid its hand on women and children. "The young females in the cotton mills," said Matthew Carey in 1824, "contract habits of order, regularity, and industry, which lay a broad and deep foundation of public and private future usefulness. They become eligible partners for life for young men, to whom they will be able to afford substantial aid in the support of families. Thus," his crowning argument was, "the inducement to early marriages . . . is greatly increased . . . and immensely important effects produced on the welfare of society." The committee on cotton of the "Conven-

tion of the Friends of Industry," held in New York in 1831, reported that "Daughters are now emphatically a blessing to the farmer. Many instances have occurred within the personal knowledge of individuals of this committee in which the earnings of daughters have been scrupulously hoarded to enable them to pay off mortgages on the parental farm." In a "Petition from Citizens of Pennsylvania" in 1820, women in villages remote from manufacturing centres were described as "doomed to idleness and its inseparable attendants, vice and guilt." Commendation was solicited for certain machines on the ground that they could be turned, one sort by children from five to ten years, and the other by girls from ten to twenty years. One protectionist carefully worked out the exact gain that came to a typical village from the fact that its children could find work in neighbouring textile factories. He came to the conclusion that "if we suppose that before the establishment of these factories, there were two hundred children between seven and sixteen years of age that contributed nothing toward their maintenance and that they are now employed, it makes an immediate difference of \$13,500 a year to the value produced in the town."

Harriet Martineau has made English readers acquainted with many of the cotton operatives who worked in the Lowell mills by her collection of extracts from their magazine, *The Lowell Offering*, published under the title of "Mind among the Spindles." It has left an idealised impression of the condition of the early mill operatives. "Conditions of work in the cotton mills of the first half of the nineteenth century were, in fact," says Dr. Abbott, "far from being as superior as the early body of operatives." Hours were notoriously long, often from five in the morning till seven at night, and in some Lowell mills the actual working day, exclusive of meal times, varied from twelve hours in the winter to fourteen in the summer. "But the girls stayed so short a time, and brought such good constitutions with them from the farms, that they seemingly escaped ill-health as a result; or if they became ill, they at once went back to their homes, and Lowell's bill of health was left clean. Many of them, too, worked only eight or ten months of the year and spent the rest of the time in their country homes." This chapter on "Early Mill Operatives" is full of interest from many points of view.

Dr. Abbott, in subsequent chapters, carefully traces the position of women in the United States in the manufacture of boots and shoes, cigar-making, the clothing industry, and printing throughout the nineteenth century. Here and there we are a

little puzzled in pursuing our way through the intricacies of the American census of occupations and of manufactures, and are inclined to attribute some of our confusion to the author. But the main thesis of these chapters is unaffected by defectiveness in statistical material, and the history of these trades in the United States may be most usefully contrasted with their development in the United Kingdom.

In a chapter on "The Problem of Women's Wages," Dr. Abbott compares the median wages of men and women and discusses their relative efficiency. Her study of the data is summarised as "contributing additional evidence in support of the fact that, in general, the low wages of women in industrial occupations is not unequal pay for equal work, but unequal pay for different and probably inferior work. In the final chapter on "Public Opinion and the Workingwoman," Dr. Abbott calls attention to the fact that the "woman movement of the last century belongs almost exclusively to educated women." "So far as industrial employments are concerned, they were considered especially suited to women at a time when men did not regard such work as profitable enough for themselves. By prior right of occupation, and by the invitation of early philanthropists and statesmen, the workingwoman holds a place of her own in this field. In the days when the earliest factories were calling for operatives, the public moralist denounced her for 'eating the bread of idleness' if she refused to obey the call. Now that there is some fear lest profuse immigration may give us an over-supply of labour, and that there may not be work enough for the men, it is the public moralist again who finds that her proper place is at home and that the world of industry was created for men. . . . The efforts of the professional woman to realise a new ideal of pecuniary independence, which have taken her out of the home and into new and varied occupations, belong to recent, if not contemporary, history. But this history, for her, covers a social revolution, and the world she faces is a new one. The woman of the working classes finds it, so far as her measure of opportunity goes, very much as her great-grandmother left it."

C. E. COLLET

Women and the Trades. Pittsburgh, 1907-1908. By ELIZABETH BEARDSLEY BUTLER. (New York: Charities Publication Committee. 1909. Pp. 440.)

MISS BUTLER'S investigation is, we are told, the first general survey of the women-employing trades of an American city. "It

is an interpretation of an industrial situation which is repeated over and over in American cities." To the English reader, the description of the conditions under which women are employed in some of the Pittsburgh industries recalls some of the horrors of our own industrial expansion in the late eighteenth and early nineteenth centuries. Miss Butler has made a detailed and thorough investigation of the 449 factories, which, besides shops and stores, employ a total of 22,185 women. She gives an account of the canning, confectionery and cracker industries, the stodgy or cheap cigar manufacture, the needle trades, the cleaning industries, the metal and glass and the miscellaneous and commercial trades. In each case we have a detailed account of the conditions under which the work is carried on, the numbers employed, the hours worked and the wages paid. The last four chapters contain a *résumé* of industrial conditions, the general conclusions which the writer draws, and her indications of how and where improvement is to be sought.

The entire work is systematic and well-arranged. It gives evidence of careful and accurate investigations, interpreted with a sympathetic understanding of the conditions, and it has the further merit of impartiality. "An industrial movement which makes for cheapness," says the writer in the introductory chapter, "or for efficiency, or for the utilisation of a hitherto only partially utilised labour force, cannot be turned back by any theory of its inappropriateness." She proceeds to prove her case for directing and controlling by law and public opinion industrial movements and practices which constitute a danger to the nation. A summary of her findings shows that the hours worked are unduly long; that the wages of 60 per cent. of the operatives are insufficient to support life, and that the conditions under which the work is carried on are, with very few exceptions, injurious to health in the last degree. The Pennsylvanian law provides for a maximum sixty-hour working week and ten-hour working day, but it would seem that although employers have on the whole discovered that overtime is not to their advantage, yet the law is more honoured in the breach than in the observance. Legal regulations enforcing cleanliness, ventilation, and the guarding of machinery seem to be altogether absent. It is interesting to note that an ironing machine, protected with hood and vent pipe, is manufactured for the export trade to Great Britain, but is not to be found in a single one of the thirty-two steam laundries of Pittsburgh. The law orders seats for women in factories and stores, but only two factories, one laundry and two mercantile

houses provide them. The high "speeding" found in all factories is the last word in injury to the working girl's physique. The strain and tension necessary to keep up with a machine, or to get through the requisite amount for a normal day's wage, lead to frequent cases of nervous breakdown. A very few years suffice to wear out the girl, and she proceeds with health impaired and vitality lowered to marriage as an escape from the evils of her condition.

The summarised conclusions are sufficiently depressing, but Miss Butler describes them with admirable restraint. The example of a few enlightened employers has already shown how the conditions of work can be made not only healthful but agreeable. Here legislation must step in, and it must be adapted to the special needs of each industry. The wages question presents a deeper problem. The majority of the women at Pittsburgh are employed in subsidiary industries at mechanical and unintelligent processes. The tendency of modern industry is to replace skilled craftsmen by less skilled or unskilled women operating with machinery. Other departments too women have invaded, where they have displaced men, doing the same work at a lower wage. They come into an occupation "not on its customary wage level," but at a level analogous to that paid to women in other occupations.

Without attempting to solve the general problem, Miss Butler deduces from her investigations the following conclusions, applicable to the Pittsburgh industries. Women are confined by lack of physical strength to a limited circle of industries. They do not look forward to a working life of more than a few years, and are unwilling to lose time by undergoing a costly training. But most of all, women are likely to be subsidised by parents or husbands, a practice which is economically unsound and socially an evil, for one form of subsidising often leads to another, and no hope of improvement can be entertained so long as custom or fact enables employers to offer less than a living wage.

For these evils the writer suggests a more thorough trade training, and an attempt to stimulate in the working girl a greater pride in her work and a greater feeling of responsibility and interest in the industry to which she belongs. This would do much not only to raise wages, but also to restore to the worker the mental alertness which a mechanical process, performed for ten hours a day without hope or further interest, is bound to deaden.

The book is copiously illustrated, and the statistical tables, both in the text and in the appendix, are lucid and exhaustive. The descriptions throughout are graphic and convincing, and the book should prove attractive to the general reader as well as to the student of industrial questions.

H. REINHERZ

Les Questions Ouvrières et la Science Actuarielle. Par MAURICE BELLOM. (Paris : H. Dunod et E. Pinet. 1909.² Pp. 101.)

IN June last an International Congress of Actuaries was held at Vienna. M. Maurice Bellom has printed a report presented by him to this assembly on the functions to be assigned to insurance offices in relation to "social insurance," and an address delivered by him on "The Social Functions to be assigned to Actuaries"; at the same time, M. Bellom passes in review a series of questions of much interest, which arise in relation to the subjects dealt with at the Congress, and furnishes useful comments on several of the reports presented to this meeting.

With respect to the meaning attached by the author to the term, "social insurance," he observes that "insurance is properly termed social when it is applied to all the individuals comprised in a social group, such individuals being considered as a group, that is to say, in relation to their possession in common of the distinctive characteristics of this group," as distinguished from "individual insurance," which is insurance applied to particular individuals acting in isolation. Thus a working man, who, without any legal compulsion, purchases from a fund (public or private) an old-age pension, is not availing himself of arrangements in the nature of social insurance; on the other hand, an employer, who, again without any legal compulsion, insures the whole of his workmen together against the risk of invalidity (infirmity incapacitating for the performance of labour), is creating, in the interests of this group of employees, an organisation of "social assurance." M. Bellom further remarks that "the term 'social' is to be applied exclusively to those risks which threaten a man himself, and not to risks which threaten the security of a man's property."

M. Bellom notes that the field of social assurance has been invaded in numerous instances by the State—a fact which he deplures, but which (he remarks) is "explained" by "the duty incumbent upon public authorities to guarantee to the community as a whole the advantages conferred by order." "But if the

existence of this duty," says M. Bellom, "may be held to explain the intervention of the Legislature, it can by no means be held to justify any excess in such intervention. Without trenching upon questions foreign to the present paper the advocates of Liberal principles—among whom I am proud to be counted—cannot but regret the establishment by force of law of a system of compulsory thrift, and the grant, under a system of liberty, of subventions which enervate individual initiative, and which impose a burden upon the public finances without securing for the recipients of this largesse any definite advantage. For these reasons, it were to be desired that private insurers should lend their aid in the development of social insurance, and in this manner exercise a tendency counteracting any excessive interference of the State; and it is possible, on many distinct grounds, to show that legal compulsion, so far from making it impracticable for private offices to take part in the organisation of insurance of the nature referred to, demands their participation as an indispensable supplement." What these grounds are in relation to sickness, accident, invalidity, and unemployment insurance, M. Bellom proceeds to discuss in detail.

Not the least valuable part of this volume is that which deals with the actuarial basis of social insurance, with the different systems adopted in relation to the provision of the funds necessary to secure the benefits which this insurance provides, and with the investment of the reserves maintained. While considerations of space make it impossible to reproduce here the technical details set forth in M. Bellom's book, those who are interested in the national scheme of insurance against sickness, invalidity, and unemployment, the outlines of which have recently been put forward by the Government in this country, will find in its pages many suggestive observations.

DAVID F. SCHLOSS

Les lois d'Assurance Ouvrière à l'étranger. Supplément général.

Par MAURICE BELLOM. (Paris: Arthur Rousseau. 1909. Pp. 588.)

IN 1892 M. Maurice Bellom published the first of a series of volumes dealing with workmen's insurance in foreign (non-French) countries, which was followed at intervals by eight further volumes, and is now brought to a close by a "General Supplement." In this final volume the author completes his work by adding material, for which space had not hitherto been found, by

noting the effect upon legislation described in the preceding volumes of laws passed after the date of their publication, and by adding an account of measures of a cognate nature, which have been carried subsequently to the appearance (in 1906) of his ninth volume. It may be observed that none of the legislation providing for insurance against unemployment (Switzerland, St. Gall, law of May 19th, 1894; Norway, laws of June 12th, 1906, and July 25th, 1908; Denmark, laws of April 9th, 1907, March 30th, 1909, and May 4th, 1909), are dealt with. In other respects, these ten volumes are a mine of useful information in regard to the industrial insurance legislation of the Continent.

So far as concerns amendments to the preceding legislation, the author has done all that lies in his power by the insertion of appropriate notes to enable the reader to discover the conjoint effect of the original German sickness insurance law of 1892, and of the successive amending enactments of 1900 and 1903. All the same, anyone who uses this book will see how troublesome it is to fit the different pieces of the puzzle together in a satisfactory manner. It seems a great pity that it should be impossible (if it be impossible) to do away with all such fragmentary legislation (mostly carried out by the tantalising method of "reference"), by first repealing a law, which it is desired to amend, and then re-enacting it in its amended form as a brand new statute, complete in itself and adapted to its purpose—the exposition, in the most intelligible form, of the actual state of the law to-day.

The additions made by this supplement to the laws noticed in the earlier volumes of M. Bellom's comprehensive work include the Danish law on sick funds, the Hungarian law on insurance against sickness and accidents, the Luxemburg sickness insurance law, the Swedish law concerning sick funds, the Belgian workmen's compensation law, and a long string of Royal Decrees in connection with the administration of this law, the Belgian laws and decrees in relation to old-age pensions, an account of Russian labour legislation (dealing with industrial accidents, factory inspection, the provision of invalidity pensions for the workpeople employed in the factories and mines worked by the State, and other subjects), the Spanish law creating a National Thrift Fund, the Italian law in relation to the National Fund for Invalidity and Old Age, and the law passed in 1907 by the Swiss Canton of Vaud for the creation of an Old-Age Pension Fund.

DAVID F. SCHLOSS

A Bibliography of Unemployment and the Unemployed. Prepared by F. ISABEL TAYLOR, B.Sc. (London: P. S. King and Son, 1909.)

THIS list, issued by the London School of Economics and Political Science, consists of nearly eight hundred books, reports, pamphlets, and articles, relating to the problem of unemployment. It includes the principal publications of the United Kingdom, and some of those of France, Germany, Italy, and the United States, for the most part within the last quarter of a century. The greater number are in the British Library of Political Science, in connection with the London School of Economics. The list was prepared for some members of the Royal Commission on the Poor Laws, and revised for the use of the Research Department of the National Committee to Promote the Break-up of the Poor Law. It should be of great interest to all students of the problem of unemployment.

A useful preface is contributed by Mr. Sidney Webb, dealing with the remedies for unemployment recommended in the Minority Report of the Poor Law Commission.

MARGRIETA BEER

How the Casual Labourer Lives. Report of the Liverpool Joint Research Committee on the Domestic Condition and Expenditure of the Families of certain Liverpool Labourers. (Published by the Liverpool Economic and Statistical Society, 1909.)

THIS inquiry into the income and expenditure of Liverpool dock labourers was intended to supply for Liverpool a companion picture to Mr. B. S. Rowntree's study for York. The budgets of forty labourers' families are given, representing probably a slightly higher standard than the average labourer's home, since homes where budgets can be got are inevitably selected, at least as regards the character of either father or mother. Each case is dealt with in considerable detail, and the committee has sought to ascertain the effect on domestic conditions of a fluctuating and precarious wage. The Report shows clearly the demoralising effects resulting from the under-employment, which is due to the want of organisation among dock labourers. The results of the inquiry will be of use to the social investigator and reformer, and form a valuable supplement to Mr. Rowntree's investigation.

MARGRIETA BEER

The History Sheet or Case Paper System. By various Authors, with an Introduction by SIR WILLIAM CHANCE, Bart. (London : P. S. King and Co. 2s. net.)

Now that Mr. Balfour has warned us that the whole of our Poor-Law machinery must be "scrapped," our interest in it is naturally less than it was. But whatever be the system that takes its place, knowledge must always be of the first importance. For knowledge helps us to discriminate, guides us in our diagnosis; knowledge will suggest the appropriate remedy. One form of such knowledge is found in a common register of all applicants for assistance in any form; another is the case paper. On this paper are entered the various applications to the relieving authority, which is to-day the Poor-Law Guardians; by reference to it the whole past history of an applicant can be seen at a glance, and his progress upwards or downwards can be traced. But this is not all. The case paper will throw light on one of the most depressing features of Poor-Law relief—its tendency to become hereditary. The little book before us puts clearly and convincingly the merits of the system, but perhaps its strongest recommendation is found in the experience of all, whether Guardians or relieving officers, who have tried it.

L. R. PHELPS

Social Forces. By EDWARD T. DEVINE. (New York : Charities Publications Committee, 105 East 22nd Street. Pp. 226. \$1.25.)

THESE essays are reprinted from the editorial pages of *The Survey*, a weekly paper recording manifold experiences in "social work." Dealing as they do with a large variety of subjects, they are necessarily to some extent disconnected; but in reading them one feels that they are really unified by the informing spirit of the writer. To all he brings a wise consideration, and a combination of breadth of view and definiteness of purpose which is very unusual. It is easy to concentrate on a definite purpose if you narrow your outlook sufficiently; it is easy, again, to be broad-minded if you don't care much about anything in particular; but Dr. Devine both knows much and cares much.

Primarily, it may be said that the book is for the instruction of the "social worker"; but the social worker in America, even more than in England, is finding scope for his activities and interests in civic and industrial matters. To judge from the book

before us, and other writings, he aims at effecting his reforms through changes in law and administration quite as much as through personal service; and child labour laws, the corruption of the police, the manufacture of criminals by a bad penal system, are considered by Dr. Devine to be as relevant as the best methods of relief. On the other hand, the social worker is also making it his business to collect facts about industrial life which afford fresh material for the economist. The *Pittsburgh Survey* is the result of one such enterprise, and in his essay on the subject Dr. Devine summarises the devastating effect which the making of a fortune in Pittsburgh has had upon the lives of the workers. Some of the points which he notes are "an altogether incredible amount of overwork by everybody, reaching its extreme in the twelve-hours shift for seven days in the week in the steel mills and the railway switchyards." "Low wages for the great majority of labourers." "The destruction of family life, not in any imaginary or mystical sense, but by the demands of the day's work, and by the very demonstrable and material method of typhoid fever and industrial accidents; both preventable, but costing in single years in Pittsburgh considerably more than a thousand lives, and inevitably shattering as many homes." "Certainly no community before in America or Europe has ever had such a surplus, and never before has a great community applied what it had so meagrely to the rational purposes of human life. Not by gifts of libraries, galleries, technical schools, and parks, but by the cessation of toil one day in seven, and sixteen hours in the twenty-four, by the increase of wages, by the sparing of lives, by the preventing of accidents, and by raising the standard of domestic life, should the surplus come back to the people of the community in which it is created."

One of the most interesting papers is on the occasion of the twenty-sixth anniversary of the Charity Organisation Society; and the writer takes the opportunity to consider the signs of promise and of danger. Among the former he cites the lessening importance of industrial causes of poverty, and of alcoholism, vice, dishonesty, and other personal causes of poverty and degeneracy. "The moral standards of the community are rising. The day of the saloon in politics and in social life has passed its meridian." On the other hand, two evils are anticipated: increased congestion of population (in New York); and increased overwork. Dr. Devine considers that a very much larger proportion of the population is subject to overwork than used to be the case. "Overwork remains certainly on a

large scale, and I fear in increasing seriousness, the one great overshadowing injury of the present day, worthy to be compared on the industrial side with congestion on the social side."

The book is one that should be widely read; but from the point of view of elderly readers the smallness of the type is a disadvantage.

HELEN BOSANQUET

Monopole, Kartelle und Trusts, in ihren Beziehungen zur Organisation der kapitalistischen Industrie. Dargestellt an der Entwicklung in Grossbritannien von DR. HERMANN LEVY. (Jena: Fischer. 1909. 1p. xiv + 322. 7m. 50pf.)

THE scientific study of economic facts is nowadays following a good deal more closely on the heels of the actual evolution. It was only towards the end of last century that the "trust movement" got well under way in Great Britain. When Mr. Macrosty wrote his book on *Trusts and the State* in 1901, the number of examples which he could bring together was still so small that it was quite possible to attribute his interest in them to his Fabian proclivities rather than to their real importance. By 1907, however, things had moved a good deal further; and, at the same time, Mr. Macrosty's incomparably more substantial and far less *tendeziös* work, *The Trust Movement in British Industry*, put into our hands a wealth of sifted information, and forced us to realise that there were such things as trusts in this country, and that they were likely to stay. And now comes an exceedingly able young German economist, and proceeds to analyse the facts for us. Great Britain can no longer be regarded as immune from trusts: the problem is no longer why Great Britain has no trusts while they are conspicuous in America and Germany. The question can only be why their appearance has been later in this country, and why they show themselves in some spheres of industry and not in others. This is the question to which Dr. Levy addresses himself in a book which will undoubtedly add to the high reputation he has already gained by his treatise of five years ago on *Landwirtschaftlicher Grossbetrieb in England*. With the German scholar's usual industry in collecting information, he combines a power of marshalling his conclusions and a gift of exposition rare in any country. In these respects, I imagine, he has learnt much from the example of his master, Professor Brentano; and, if the disciple has not altogether lost the bias that every great teacher is apt to impress

upon his students, he certainly shows a refreshingly large degree of objectivity.

On this occasion, I must pass over the first half of the book, dealing chiefly with the "monopolies" of the sixteenth and seventeenth centuries, and with the Newcastle Vend of a more recent period. It is the outcome of a great deal of research at the British Museum and the Patent Office, and it cannot be neglected by the economic historian. But it contributes but little to our understanding of present conditions; and the time to estimate it properly will come as soon as we have in our hands Dr. Scott's more penetrating studies of the early business corporations. Let us proceed at once to the more immediately significant chapters.

The precise problem before us, as Dr. Levy is never tired of repeating, is not of the merits or demerits of combination, but simply of the conditions by which combination is promoted or impeded. One condition, which explains some of the most important trusts and cartels of other countries, is the existence of easily monopolisable mineral resources. A comparison of the number and position of the coalfields of America and Germany with those of Great Britain sufficiently accounts for the absence in this country of a coal trust; and this conclusion is confirmed by the circumstance that, though no large combination has as yet been successful in the coal-mining industry, it is precisely in the one coalfield which owes to the peculiar quality of its product a certain position of advantage—the steam coal area of South Wales—that projects of combination have been most seriously entertained. Even when a monopoly is possible so far as domestic producers is concerned, it can only raise prices to the level of import prices—though indeed, short of this point, there is room in some instances for a not inconsiderable rise—if the monopoly is protected from outside competition. This protection may be furnished by tariffs, or it may be created by heavy freight charges. But the greater part of industrial Britain is so readily accessible by cheap water carriage, and the distances to inland centres are relatively so small as compared with those in Germany or, still more, those in the United States, that the latter favourable condition is practically absent in this country. And thus, without denying that tariffs furnish, under certain circumstances, conditions favourable to the promotion of trusts, it is evident that their absence from England until recent years can, to a very large extent, be readily accounted for by physical circumstances.

And yet a number of important combinations, exercising a

greater or less degree of control over price, have of late managed to come into existence in spite of the absence of the favouring conditions just set forth. Limiting himself to industrial organisations, and leaving out of account the combination movement in transportation (*e.g.*, the shipping rings and the railway amalgamations and agreements), Dr. Levy gives an account of some eighteen of the largest, with a view to ascertaining the predisposing circumstances in the several cases. They are roughly divisible into three groups. First there are those which are only exempt from foreign competition up to a certain point, and cannot afford to disregard it. To this group belongs (1) the Portland Cement combine, which enjoys a natural protection in the cost of transportation; (2) the three associations or agreements in branches of the Steel trade; (3) the Industrial Spirit supply company; (4) the Wallpaper manufacturers' amalgamation; and (5) the Electric Cable association. The second group consists of combinations practically exempt from foreign competition. To this belong (1) the Salt syndicate, which since 1906 has combined the interests of the Salt Union with those of the "outsiders"; (2) the Fine Cotton Spinners; (3) the Sewing Thread trust—the advantage over foreign competitors in the last two cases consisting in the quality of the product; (4) the Bleachers' association of Manchester and the Dyers' association of Bradford, both enjoying a certain local monopoly dependent on water supply; (6) the Calico Printers' association; (7) the Locomotive business, protected by the special requirements of English railroading and of English railway engineers; and (8) the Whisky Distillers' company. The third group consists of those protected from foreign competition by international agreements. To this belong (1) the Steel Rail business; (2) the Soda business; and (3) the Tobacco business. In all three groups regular foreign competition is prevented either by cost of carriage, or by international agreement, or by the character or quality or reputation of the goods. And, be it observed, that if, as some say, England will be able to escape the consequences of foreign competition by exchanging its foreign sale of coarse goods for a more highly-priced trade in finer or more finished products, the external conditions favouring combination will be created *pari passu*.

The question remains as to internal conditions. Why are not such combinations defeated by the appearance of fresh domestic competition? The answer is to be found, according to Dr. Levy, in "the movement towards concentration"—*i.e.*, the growth in the size and cost of the producing unit under modern conditions

of machine production. Our author distinguishes, as others before him, between vertical and horizontal combinations; but, so far as I can see on a somewhat hasty reading, he does not very clearly distinguish between the advantages obtainable in these two different ways. "The economies of combination," however, have been sufficiently examined by previous writers. What Dr. Levy has chiefly in his mind is the producing unit in the narrower sense of the word "production"—i.e., the size of the several "plants." *At the beginning and end of his discussion, he quotes a pregnant phrase of Mill. A business, said Mill, as long ago as 1848, may "only be carried on advantageously upon so large a scale as to render the liberty of competition almost illusory." (*Principles*, Book 1, Chapter IX., Section 3.) Mill's remark was made *à propos* only of gas, water, and railway concerns; but, as has happened in other cases, Mill's exception turns out to cover a much wider range of fact than that economist supposed.

It would be interesting to hear what Dr. Levy would say to the recent contention of certain English writers that a limit is placed to the monopolistic effect of the growing necessity for large expenditure of fixed capital by the existence of a unit of maximum economy of production. To judge from his general line of argument, I imagine his reply would be that, granting the existence of such an economic unit, it is tending more and more, in certain business, to become so large that the appearance of a fresh competitor in the field, when once the few existing producers have combined, is being made more and more improbable. For, as Dr. Levy points out, it is not simply a question of the cost of duplicating an efficient plant. It is a question of the ever-increasing productive capacity (one might say productive necessity) of a modern plant. The proposing competitor has not only to think first of securing the capital and then of the time required for the "installation" of the plant; he has to think of the effect upon price of putting upon the market the additional quantity which his works must turn out if they are to be run economically.

If we accept—and I suppose we must—Dr. Levy's main line of argument, it follows that, whether this country abides by the policy of free trade or not, the future of the trust movement is bound up with the technical requirements of efficient production, and its extension will depend on the degree to which these requirements call for more expensive plant. And as, on the whole, the tendency in manufacture is toward the fixation in plant of ever larger masses of capital, the trust organisation is likely to grow, though

it may for an indefinite period, or possibly for ever, fail to show itself in certain industries. Dr. Levy argues, indeed, that so long as free trade continues, the development will be slower than in protectionist countries, and that the pecuniary profits of monopoly will be less, though by no means non-existent. That it has hitherto been slower cannot be denied: but the extent of the pressure of foreign competition will in future depend not only on tariff or freight barriers, but also on the progress of international agreements to divide the market; and we have hardly yet sufficient experience to enable us to say how far international agreements are possible under free trade. As to prices, I cannot say that Dr. Levy's argument altogether compels assent. I should want a good deal of evidence to make me feel sure that "the Standard Oil Company, in its fixing of prices, has thought of nothing but the possibility of competition, and the idea that enormously high prices might bring about a perilous reduction in demand has never played any part." The testimony cited by Dr. Levy about borax—that "consumption is a fixed amount independent of price"—would seem to be an exception that proves the rule. I can't suppose the labour spent by economists on the discussion of "monopoly price" has been altogether wasted; and the American text-book writers would seem to be justified in teaching that "to the extent that they exercise monopoly powers, self-interest will lead the trusts to obey the principles governing monopoly price." (Seager, *Introduction to Economics*, Section 274). Dr. Levy can hardly intend to imply that price has no effect at all on consumption in the case of any of the trust goods produced in protectionist countries. Moreover, his oft-repeated phrase about prices in protectionist countries equalling import prices *plus* duty, would be the better for the qualification that the import prices in question are not necessarily what they would have been but for protection. As a competent investigator once wrote about American tinplates: "The tariff is \$1.62 per box of 108 lb., and in consequence English plates are now delivered in New York at just this sum below the prices ruling in the United States. Although it is now possible to buy English plates at this very low rate, it is not at all certain that such would have been the case if the present American industry had not come into existence." (McVey, in Ripley's collection, *Trusts, Pools and Corporations*, page 302.)

These, however, are subsidiary points of Dr. Levy's book, and are less worked out than the rest. The main line of his argument is quite sufficient to awaken our gratitude and heighten the

author's reputation. He builds upon Mr. Macrosty's great collection of material (with large additions, of course, of his own); but he does not displace it. For what Dr. Levy's is inclined to regard as defects in Mr. Macrosty's treatment may for other purposes he merits. What Mr. Macrosty was bent upon showing, and does show, is that the tendency, by agreement or combination, to lessen the pressure of competition, displays itself in almost every part of the economic field. A slight weakening or retardation of the circumambient coercion of competition may be a significant phenomenon, especially if it is widespread, even if it is still very far removed from "monopoly" or "autonomous control of price." Nevertheless, it is certainly true that we can understand the position of the more completely successful combinations, the more clearly if we concentrate our attention upon them and provisionally isolate the factors involved; and this is what Dr. Levy has done with brilliant success.

W. J. ASHLEY

India and the Tariff Problem. By Prof. H. B. LEES SMITH, M.P. (London: Constable and Co. 3s. 6d. net.)

THE place that should be assigned to India in a scheme of preferential tariffs is really one of the fundamental problems in the fiscal controversy, but a straightforward answer is so inconvenient to the politician bidding for votes in an English constituency that the question is usually shelved. Both sides have their special perplexities. The Tariff Reformer who argues that protection is good for this country has to explain why protection would not be equally good for India, and in particular why it would not be good for India to protect herself against England. Mr. Lees Smith, being a Free Trader, concentrates attention upon this aspect of the problem. He reminds us that the honour of Great Britain is pledged not to subordinate the good of India to the selfish interests of British manufacturers, and that we could not force India to adopt Free Trade if we did not believe that we were acting for her good. If we are ever convinced that protection is good for England, we shall be obliged to grant India her fiscal freedom and allow her to erect a protective tariff. Mr. Lees Smith's exposition of the consequences to British trade is convincing; he shows that the Indian import trade, which Great Britain might possibly divert to herself by means of a preference, does not amount to more than 10·4 million sterling, and he argues, irresistibly as it seems to me, that British trade would suffer a

staggering blow if in return for this small advantage it were confronted with a tariff barrier in the only great free market we now enjoy.

But this does not answer the vital question, "Is Free Trade good for India herself?" Most economists will allow that the protection of infant industries is no departure from Free Trade orthodoxy, and why, therefore, though Free Trade may be the right policy for England, should India not protect her infant industries against the competition of England? Mr. Lees Smith is too conscientious a student to ignore this difficulty; his answer is that what Indian industry is suffering from is lack of initiative and self-reliance, and that this weakness would be encouraged rather than removed by protection. There is no doubt something in this argument. Certain Indian industries are languishing solely because they are carried on by obsolete methods; if they do not flourish with all the advantages that Nature has showered on them, neither will they flourish with the help of the most stringent protection. But the argument somewhat undervalues the incentive to effort which protection would probably give. It is hard, no doubt, to persuade the Indian artisan to leave the rut of long-established custom, but a profit of one hundred per cent. is more likely to accomplish that feat than one of ten. English industry was revolutionised by the prospect of making thousands per cent., and it is not certain that the yeoman would have left his land if the prizes had been as modest as those in Free Trade India.

T. MORISON

Money's Fiscal Dictionary. By L. G. CHIOZZA MONEY. (London : Methuen. 1910. Pp. vii+315. 5s. net.)

THE title of this book is somewhat misleading, for it is in reality little more than a handbook for Free Trade speakers. Mr. Chiozza Money, as he tells us in his preface, has incorporated in this *Dictionary* numerous articles which he has contributed, during the past few years, to various newspapers, periodicals, and annuals. The book, however, is not what its author intended it to be, for it was his aim "to make it encyclopædic in character, but the protraction of the Parliamentary session of 1909 has compelled him considerably to modify his ambition, and the imminence of a general election seems to render it inadvisable to postpone the publication of a work which, while admittedly incomplete, and far short of what he desired to make it, will, it is believed, prove of some value to the student of affairs" (p. vii).

The book must, no doubt, have been invaluable to Free Trade speakers during the recent general election, and it is in many respects a useful work of reference. But it can, we think, hardly be regarded as a very important contribution to the literature of the subject which it treats. The treatment of many of the topics dealt with is one-sided and very inadequate; *e.g.*, under the heading *Tariff Reform*, we find the following: "'Tariff Reform' is a term which, in the methods of Protectionists, abuses language, ignores history, and defies fact" (p. 262). The book deals much more with facts than with theory, and often shows a lack of the sense of proportion with regard to the space allotted to the various topics; *e.g.*, *Agriculture* has twenty pages, *Import Duties, Incidence of*, only two. Parts of the book are of only ephemeral interest; *e.g.*, much of the excellent article on unemployment is taken up with an examination of the very remarkable statistical methods employed by the *Daily Express*. Again, a lengthy discussion on the question of the nationalisation of railways, under the heading *Railways*, appears to us to be somewhat out of place in a *Fiscal Dictionary*.

The historical articles are the weakest in the book; *e.g.*, to say that "the conception of the mercantile system was that the wealth of a country increased by virtue of exporting much, importing little, and drawing the balance into the country in the form of gold and silver" (p. 164), is only to state a half-truth. Again, surely more than a single page might have been allotted to the Navigation Laws.

The numerous statistical tables, which are admirably clear and well-arranged, form much the most valuable portion of the book. The statistics of the world's output of coal under the heading *Coal*, to which the author calls special attention by a diagrammatic frontispiece to the book, are of great interest. It is, perhaps, not generally known that "three countries—America, Britain, and Germany—have a practical monopoly of the world's coal, between them producing eight out of every ten tons" (p. 80), a fact which, as Mr. Chiozza Money points out, goes far towards explaining the industrial success of these three countries, quite apart from any question of fiscal policy.

The articles on Revenue from Protection, and a Scientific Tariff are, we think, two of the best in the book, and may be recommended to those who are anxious for this country to adopt a tariff on the American or German model.

We hope that Mr. Chiozza Money will at some future date be able to carry out his original design, and bring out a dictionary

which will be not merely "encyclopædic," but also non-controversial in character.

HENRY S. FURNISS

The Commonweal. A Study of the Federal System of Political Economy. By ALFRED P. HILLIER, B.A., M.D. (London, &c. : Longmans. 1909. Pp. xii+162. Price 4s. 6d. net.)

IN one respect this book is a disappointment. Its sub-title suggests a treatment of one of the most neglected, and yet one of the most important, aspects of the Tariff Problem. For Federal Economics, or the Economics of Large Empires, as opposed to those of independent nations, have many features of their own, and, in dealing with them, it is often necessary to drop or to modify arguments that have an important place either in a national or a cosmo-political system. More particularly is this the case in relation to the Fiscal Question. For a large self-supporting area will, according to the point of view, be less liable to suffer from, or peculiarly fitted to profit by, the adoption of protection against the whole world. Indeed, Free Traders often use this very argument against English Tariff Reformers. Yet a self-sustaining Empire, united by Tariff Preferences, is also in a position to reap most, if not all, of the benefits of Federal Protection; and the addition of Imperial Preference greatly reinforces the case for a National Tariff. Nothing, indeed, could well have been more interesting than a purely economic treatment of this matter.

Unfortunately, Dr. Hillier's book, excellent as it is in its way, does not do this in spite of its title. It is another statement of the general case for Tariff Reform, clear, lucid, and on the whole well-reasoned; but it only incidentally touches on the Federal question, notably in the chapters devoted to America and Germany. Here it does deal with the subject, and not at all badly; but what we really want is a book devoted to it entirely. Still, "The Commonweal" is well worth reading, and its lucidity and brevity will make it useful to the general public. Moreover, it is generally sound in its reasoning, and, if not rising to great heights, is singularly free from economic fallacies.

The first chapter deals with writers and systems. The author rightly contrasts the nationalism of Adam Smith with the cosmopolitanism of "the school," whilst the description of Economic Science as a "complex variable" is quite good. The second

chapter describes the coming of *laissez-faire* and its history, and rightly insists on the important part played by the "natural protection" of freight charges in the early days of Free Trade. But Dr. Hillier's attempt to disprove the doctrine that "imports must be paid for by exports" in the chapter on Economic Fallacies is both unconvincing and ill-advised. Surely the line to follow was that it is "the character and the extent of the exchange" that matters, and if this is so, the dogma, though true enough, has little bearing on the real question at issue.

After this American Protection and the German Customs' Union are considered, as is the industrial development of this country before Free Trade. The book then pursues its orthodox road to its conclusion, with chapters on "Great Britain's Free Trade Era," the "Colonies and India," and, a short concluding one, on "Democracy and Empire." In the second of these, which is particularly well written, the chief proposals for preference are discussed. Many of the arguments used are what one would expect, but some new and interesting points are raised and the treatment is not seldom original. The need for nursing the sick, as well as the infant, is neatly phrased. The author's ground is, except in chapter iii., well chosen, and he has evidently a sound knowledge of Political Economy. The book is quite a good ex-parte statement, from a point of view that is not very common; but we cannot but regret that Dr. Hillier did not give us that scientific treatment of Federal Economics as a whole. Perhaps, however, that is a pleasure to come.

N. B. DEARLE

Introduction to Public Finance. By CARL C. PLEHN. Revised edition, 1909. Pp. 480. (New York: The Macmillan Co., 1909.)

THIS considerably enlarged edition of Professor Plehn's valuable treatise on finance, first published in 1896, comes at an opportune time when various problems of finance are agitating this and other countries. The new edition contains informing discussions on recent fiscal developments, and the statistics are revised to a later date. The salient features of the tax systems of Great Britain, France, Germany, and the United States are described and contrasted with an historic insight and perspicacity which bring to relief their respective merits and defects. In particular, the working and effects of the American property-tax are exhibited with a frankness which enables a just estimate to

be made of its worth as a mode of taxation; comparison is naturally called forth with the income-tax which may be regarded as its counterpart in the system of Great Britain.

The case for and against the property-tax is stated very impartially; the outcome is, that property does not form a just basis for a test of tax-paying ability; the administration of a tax on all forms of property cannot be equitable, and must be costly and irritating when carried out consistently; when administered with laxity, as is frequently the case, it is open to all kinds of oblique influences, both on the part of the subjects of taxation and the assessors of the values to be taxed. Assessment seems to be largely a matter of guessing, modified by reductions in the case of the one who challenges it, while the one who does not protest suffers injustice. The taxation of money and credit is shown to lead to almost universal evasion, false representation, and to injustice when evasion does not take place. The taxing of credit is unsound in principle; it amounts, in fact, to double taxation, since both the property represented and the loan are taxed separately.

Professor Plehn explains the continuance of the property-tax in the States, and the grounds of its justification, as due to two predominating sentiments—(1) The right of the State to control the power of bequest; (2) the desirability of curbing the perpetuation of large fortunes. On these reasons two comments suggest themselves to an English observer:—(1) That it is not so much the right or power of the State which calls for consideration, as the wisdom, equity, and expediency of the tax; and (2) that it might be profitable to push the investigation back a step, and inquire into the circumstances which have fostered the accumulation of large fortunes in the States: these will be found to be connected with the trusts and monopolies and the conditions which enabled them to grow up; and the mainspring of the whole situation is in the tariffs which have created and which protect vested interests.

Bad legislation has, in fact, created the monopolist plutocrat; then corrective legislation, of an almost equally unsatisfactory type, is employed to check the perpetuation of the consequences. A remedy more direct, if not more simple, would be to sweep away the protective system which rendered the evil possible. Doubtless it is difficult to apply so drastic a remedy after a century of growth; but the object-lesson should be a warning to Great Britain not to enter upon a course which may eventually raise up a like fiscal Frankenstein in this country.

Professor Plehn concludes that property is no longer in the States a criterion of *faculty* or of tax-paying ability; it is the income which property yields that is the best index of the tax-paying power which property represents. In the words of Professor Seligmann, "The general property-tax as actually administered to-day is beyond all peradventure the worst tax known in the civilised world." . . . "It fails entirely to reach intangible property, it debases public morals, and it presses hardest upon those relatively least able to pay."

On the inheritance tax Professor Plehn makes the pregnant remark that it draws upon *accumulated* capital and expends the result upon *current* expenditure, an improvident proceeding. His conclusion is that it would be wiser for the State to invest the capital then taken by taxation, and apply only the interest to current purposes. We are reminded of Mr. Gladstone's proposal to apply death duties entirely to the reduction of National Debt, *i.e.*, to devote a tax on capital to the extinction of capital debt.

The progressive principle of taxation seems to have taken firm root in the United States. Professor Plehn gives an analysis of the working of the principle of graduation, with interesting diagrams, illustrative of its application to the British and Prussian income-tax systems. He believes in a tendency for a progressive rate to become confiscatory, and remarks that "the motive for a progressive rate is always something other than the purely fiscal one."

The tendency to increased application of the progressive principle is illustrated from the case of the newest State, Oklahoma, where "the progression is so rapid and intense that on a bequest amounting to 94,500 dollars, it would, in the case of a stranger in blood, confiscate to the State all but 100 dollars."

Professor Plehn does not enter upon the general discussion of tariffs and protection, regarding it as beyond the scope of his work. He holds, however, that political economy gives no countenance to the notion that artificial direction of industry through tariffs can increase the world's production, and he admits that a protective policy is the outcome of national selfishness, and that the aim at diversity of products is its best defence; in this case the sum paid in tariffs is a subsidy to develop the protected industry. This, no doubt, is the strongest argument for protection; it is, in effect, the infant industry plea; but a study of its working in the States, and of the trusts and monopolies which have been created under its wing, supports the view that its application results in sacrificing the well-being of the community to the

selfish interests of wealthy limited corporations. On one point Professor Plehn is clear, "the subsidy paid to the producer is paid by the consumers within the country; this part of the tax is never shifted to foreigners, and generally remains on the consumer." Professor Plehn enumerates the cases in which part of the tax may be paid by foreigners or others than the consumers; these resolve themselves into cases of temporary monopoly of some kind which affect prices, and through them react upon demand. Professor Plehn remarks that a "tariff for revenue only" is an unattainable ideal. In a sense this is true, since a tax on any import must react upon the general trade of the country through its effects upon the amount imported, and thereby upon the international trade balance. It alters the volume of trade; this, however, is an *indirect* effect and does not impugn the *bona fides* of a "tax for revenue only," by which is meant that the aim of the tax is revenue and not protection or any other object, open or concealed. It must be allowed that every tax will have indirect effects, and its incidence may be diffused in some degree often not traceable. Even the income-tax, by impairing a man's purchasing power, affects those industries on the products of which he would have expended the amount abstracted by taxation had it been left with him for his consumption.

The chapter on Customs gives a condensed yet instructive account of the effects of tariff systems in several countries. The amount of legislation they involve, their complexity, variety, trouble, and inconclusiveness should be a warning to those who contemplate entering upon the disturbed sea of tariffs.

In conclusion, Professor Plehn is to be congratulated on the increased value conferred on this useful book by revision. The large experience of the writer, his familiarity with a difficult subject, and his acute powers of analysis render his book not less interesting than informing to those who find themselves attracted by financial topics.

G. ARMITAGE-SMITH

Wirtschaft und Kunst. Eine Untersuchung über die Geschichte und Theorie der Modernen Kunstgewerbebewegung. By HEINRICH WAENTIG. (Jena. 1909. Pp. v + 434.)

UNDER this attractive title the writer gives us an historical survey of the modern arts and crafts movement, which he supplements by a theory of art in relation to production. The first portion of the volume, which deals with the renaissance of the "lesser arts," is undoubtedly the best part of the book. The reaction against the æsthetic ideals of a capitalistic

society began in England; not—the writer hastens to add—that England has ever been known to lead the way in matters of taste, but simply because she was the first in point of time to reach that stage of economic development which made the birth of a new art possible. The prophets of the movement were Carlyle, Ruskin, and Morris, and the writer traces the evolution of England's superiority and success in the decorative and domestic arts through three very readable chapters. The new English art sought to derive from the use of an object the kind of ornament best suited to it, and the form best adapted to serve its purpose. This gave it a kind of honesty, a stamp of intelligibility, which marked an epoch in the history of art. France, who in matters of taste had led the world for centuries, had to own herself surpassed. America has not yet come into her kingdom. In Austria and Germany there are signs of a revival, but in spite of much industry and application Germany has produced no national style. What she has achieved is a decorative art suited to the *café*, the restaurant, and the public hall, but not to private life. The influence of the British school has penetrated everywhere, and Morris has found many imitators, but no rival.

The chapters on the theory of art in relation to economics are less lucid than the historical survey, nor, apart from the position that art is largely dependent on economic conditions, does it become very clear what the writer aims at proving. His criticism of the outlook is pessimistic: art is hampered by our modern methods of production, since the capitalist producer has no interest in the beauty of the product. Nor is any improvement to be looked for in a Socialistic state, since the Socialist leader of production, freed from the fear of competition, will have even less incentive than the capitalist to make his product pleasing. In conclusion, the writer reminds Germany that her part in the world of artistic production has yet to be played. There are, in this civilised age, no worlds left to conquer save that of art. But Germany has so far nothing in this realm that she can offer in substantiation of her claim to be a leader among nations. Her achievements in science will not save her from the old reproach that she is a nation of learned barbarians. Centuries of neglect have to be atoned for, and though much has been attempted, much more remains to be done.

H. REINHERZ

Die Frauenfrage im Mittelalter. By KARL BUCHER. (Tübingen. 1910. Pp. vi + 92.)

THIS is a brief, historical monograph, with a warning. The Middle Ages, no less than the present day, had their woman's

question—a question mainly of occupation. Then, as now, women were in the majority, and then, as now, despite all theories to the contrary, the superfluous women had to live. Industry absorbed a certain proportion, and the writer offers the opinion that in the Middle Ages women were not excluded from any industry of which they were capable. For some the cloister became a refuge; for others who wished to live a retired life on small means, "*Samenungen*," or settlements, provided shelter. The "*Bekinenhaus*," a thirteenth century institution which survives to this day in the Netherlands, was designed to meet the needs of the poorest classes. These institutions and the services they rendered, the abuses to which they eventually became liable, and the poverty and misery which they were unable to deal with completely, are described in detail by the writer and with considerable sympathy.

The Middle Ages, then, did their best according to their lights to deal with the problem. Can the present day claim to be equally successful? The Reformation swept away the settlement and the "*Bekinenhaus*," but it sanctified the marriage tie, and introduced the tendency to shift to the shoulders of men the burden of production, while leaving to women the work of administration in the home. To-day capitalism, the factory system and mechanical labour have given a set-back to this era of development. The question in the Middle Ages was one of livelihood, to-day it is one of emancipation. Behind the question of mere occupation lurks this dangerous and much more difficult problem.

As regards the outlook, the writer is infinitely gloomy. A plea for co-operative kitchens by an American writer rouses him to violent indignation. Cheap female labour, the return of women to the ranks of industry, mean the fall of man and woman alike under the yoke of capitalism, the break-up of the family, the return to barbarism. This surely cannot be the goal towards which the development of two thousand years of progressive civilisation can be allowed to lead us. A solution of the problem is not within the scope of this volume, nor, we imagine, within the capacity of the writer.

H. REINHERZ

Collection des Économistes et des réformateurs sociaux de la France. (Paris: P. Geuthner. 8vo. 1910.)

UNDER this title Professor A. Dubois, of the University of Poitiers, is arranging to issue a series of reprints of French works illustrative of the history of economic and social theory. Brief notices are prefixed to each volume with the object of assisting

the reader to understand it. But we are informed that the notices will be unambitious, neither studies of the authors nor their doctrines, sparing alike in biography and in commentary.

A beginning is made with the Physiocrats. Professor Dubois edits Dupont de Nemours, *De l'origine et des progrès d'une science nouvelle*, 1768, and follows with a second volume, Baudeau, *Première introduction à la Philosophie Économique ou Analyse des États policés*, 1767. The third volume, Le Mercier de la Rivière, *L'Ordre naturel et essentiel des sociétés politiques*, 1767, is introduced by Professor Depitre, of the University of Lille. The volumes reproduce in facsimile the title pages of the originals, and the pagination of the first editions is indicated by references in the text. The editor is of opinion that these three works may be regarded as a primer, a secondary text-book, and an advanced treatise on Physiocracy. They are, perhaps, the pure milk of its essential theory. But the Physiocrats were more than theorists, and the student should know something of their less abstract writings and their practical politics in order to estimate their work at its proper value.

Criticism is disarmed by the modesty of the announcement above referred to. The introductory notices are slight, and call for little comment. A long note by Professor Dubois upon his inability to discover any trace of Volume VII. of the *Éphémérides* for 1766, and his doubt whether it ever existed, may justify the remark that there is overpowering evidence to the fact that it was never published. A set of this exceedingly rare economic review may now be consulted in the Goldsmiths' Library of the University of London.

Single-taxers and students of the history of economic literature have recently shown increased interest in the Physiocrats. But it would be sanguine to suppose that there will be any large circle of readers of Le Mercier de la Rivière, how accessible soever his "advanced treatise" may become.

HENRY HIGGS

Principles of Political Economy. By JOHN STUART MILL. Edited with an Introduction by W. J. Ashley. (London: Longmans. 1909. Pp. 1013.)

•PROFESSOR ASHLEY is fortunate in the opportuneness of his publication. The country has been for many months agitated by a debate relating to the expediency of measures of which the most authoritative, if not quite the earliest, exposition is to be found in Mill's *Political Economy*. The work has been quoted

by the Prime Minister in the House of Commons and by an Archbishop in the House of Lords. Most of the arguments in favour of taxing both unearned increment of land value and inherited property, which have resounded on Liberal platforms, are derived more or less consciously, more or less accurately, from Mill's *Political Economy*. The access to this source of influence is facilitated by Professor Ashley. His introduction is, indeed, a leading into the mind of his author. He sketches Mill's mental history in a truly historical spirit, forbearing "to interpose between the reader and the author, and to assign either praise or blame." His treatment is not less objective because he recognises the magnitude of the object: "It is a great treatise, conceived and executed on a lofty plane, and breathing a noble spirit." "Mill," remarks the editor sympathetically, "is a very human personality"; and the remark is illustrated by the variations of feeling shown in changes which Mill introduced in the successive editions of his work. In the laborious work of collating the different editions, Professor Ashley has been assisted by Miss M. A. Ellis's article in the *ECONOMIC JOURNAL* for June, 1906. Miss Ellis also contributes a Preface; supplying a want which had long been felt by students. We still desiderate an *apparatus criticus* which might point to and bring into one view passages connected by identity of logic rather than of terminology: for instance, all the passages affected by Mill's difficult doctrine that "demand for commodities is not demand for labour." Professor Ashley does indeed contribute to the interpretation of his author by his Bibliographical Appendix. The succinct notes here appended seem to us to be almost ideally adapted to the purposes of education. The select references will either suffice for the student, or will lead him on to other authorities. It is thus that a few introductions to the principal personages in a neighbourhood will usually enable the recipient to extend his acquaintance to others of less note. We could wish that the introductions furnished in the Appendix were more legibly printed. It is a misfortune that the long extract from Mill's important but not easily accessible fragment on Socialism, here reprinted, should be visible only to the "microscopic eye." But this is the fault of the publisher, or of the public taste which he caters for. We have only praise for the editor.

F. Y. EDGEWORTH

NOTES AND MEMORANDA

THE AMERICAN ECONOMIC ASSOCIATION.

IN the last week of 1909 the American Economic Association celebrated its twenty-fifth anniversary by a joint Congress at New York with the American Historical Association. Other American societies, representative of Political Science, Sociology, Labour Legislation, Statistics, Social Science, Church History, and Bibliography, also joined forces for the occasion, and the result was a very large and impressive gathering. The seven sections worked through a crowded programme of meetings, papers, discussions, luncheons, dinners, and entertainments. The proceedings were opened by a citizens' welcome at the Carnegie Hall. President Taft was prevented from fulfilling his promise to attend and deliver an address owing to a severe snowstorm, which suspended railway communication between Washington and New York. Mr. Choate, who presided, Governor Hughes, and the Mayor of New York, rendered testimony to the great services rendered to public administration by the learned societies assembled. Practical recognition of this feeling has, for the moment, its embarrassing side. The growing tendency of the Federal and State Governments to attach young economists to their service, makes it exceedingly difficult to find occupants for the rapidly increasing chairs in the various economic faculties.

President D. R. Dewey, of the Massachusetts Institute of Technology, presided over the Economic Association, and chose for his address the subject of "Observation in Economics." Almost all the leading American economists were present, the Presidents of Harvard, Yale, Columbia, and other Universities, and representatives from England, France, Germany, Holland, Spain, China, and Japan. Italy was to have been represented by Prof. Pantaleoni, but he was detained at the last moment, and his paper on "Dynamic Economics" was read in his absence. Other papers were on the "Theory of Wages," by Prof. Taussig;

"Trusts," by Mr. Francis Walker and Mr. V. Morawetz; "Taxation," by Prof. Seligman; "Assessment of Property," by Mr. Lawson Purdy; "Rural Economics and Conservation," by Sir Horace Plunkett; and the "History of the Founding of the American Economic Association," by Dr. R. T. Ely—the last at a symposium in which President Hadley, Dr. Albert Shaw, Professor Laughlin, Dr. James Bonar, Professor James Mavor, and Dr. E. James were among the speakers.

The President of the Royal Economic Society was unable to accept the cordial invitation of the Association to be present at the Congress. At his request Mr. Henry Higgs attended on his behalf, and conveyed to the Association the fraternal greetings of the British Society, our congratulations upon its past achievements and present condition, and our good wishes for its future. Speaking on behalf of the foreign delegates at the banquet of reception, he sketched the obligations of Old World economists to American writers and American experience, and expressed the hope that our American friends would add to these obligations by paying us a visit—a suggestion which was very warmly welcomed. Mr. James Bryce, one of our Vice-Presidents, equally at home in all seven sections, was evidently a great popular favourite. Dr. G. W. Prothero and Mr. H. A. L. Fisher represented British historians. The Congress was a brilliant success, and afforded striking evidence of the vigorous vitality of the Economic Association, and of its powerful hold upon, and influence over, American public men.

THE AMERICAN COMMISSION ON COUNTRY LIFE.

ON August 10th, 1908, President Roosevelt appointed a commission of five persons (to which two persons were afterwards added) to make a preliminary investigation of the rural conditions in the United States. The purpose of the commission is concretely stated in these two sentences from the President's letter in which he asked the persons to serve on the commission:—"I shall be glad if the commission will report to me upon the present condition of country life, upon what means are now available for supplying the deficiencies which exist, and upon the best methods of organised permanent effort in investigation and actual work along the lines I have indicated. You will doubtless also find it necessary to suggest means for bringing about the redirection or better adaptation of rural schools to the training of children for life on the farm."

The commission consisted of L. H. Bailey, of the New York State College of Agriculture at Cornell University (chairman); Henry Wallace, editor of *Wallace's Farmer*, Des Moines, Iowa; Kenyon L. Butterfield, President of the Massachusetts Agricultural College, Amherst, Massachusetts; Walter H. Page, editor of *The World's Work*, New York City; Gifford Pinchot, United States Forester, and Chairman of the National Conservation Commission; C. S. Barrett, President of the Farmers' Co-operative and Educational Union of America, Union City, Georgia; W. A. Beard, of the *Great West Magazine*, Sacramento, California.

It was the President's desire, in view of the early termination of his administration, that the commission should report to him in the following December. It was not expected, of course, that any thorough investigation of the rural conditions of the United States could be made within that time, but the President expected that the commission would be able to make "a summary of what is already known, a statement of the problem, and the recommendation of measures looking toward its solution." What the commission attempted to do, therefore, was to make an exploration or reconnaissance of the general field. It desired to secure first-hand information, opinions, and impressions of farmers, rural ministers, teachers, merchants, physicians, and others, in respect to the agricultural and general rural status. It endeavoured to secure this information by sending out more than a half-million questionnaires requesting information in regard to the agricultural condition of the locality, and for an estimate of the most important agricultural needs, opinions on the labour problem, good roads, communication in rural communities, organisation, and the like. It also held hearings in many parts of the United States, from Massachusetts to California, and Minnesota to Texas, for the purpose of enabling the people to express their views directly to the commissioners. Each member of the commission was also assigned a general block of topics for special investigation; for example, to one member was assigned the general question of organisation in rural communities, including the church; to another the educational problem; to another the questions of public health; to another the problems associated with labour, tenantry, and the like; and to another the matters that specially concern the rural home.

Many more than one hundred thousand of the circular questionnaires were returned with answers; about thirty hearings were held; following a suggestion made by the President in a subse-

quent letter to the commission, meetings were held in great numbers of rural schoolhouses in many parts of the country for the purpose of discussing the questions that the commission had raised, and a heavy correspondence began at once to arise. It was evident that the general public was ready for a discussion on country life. Probably no single movement set out by President Roosevelt gained more instant recognition or aroused more comment.

Some of the comment was unfavourable, largely from a misunderstanding of the purpose of the commission. Many persons supposed that the commission was to engage in "uplift" work, and this was resented by many farmers and by some of the agricultural newspapers. The purpose of the commission, however, was in no sense to "uplift" the farmer, as the word is commonly understood, but merely to make an exploration of the general field for the purpose of determining whether there are conditions in rural civilisation of which the Government should take cognisance.

The commission submitted its report to the President on January 23rd, 1909. This report comprises about fifty printed pages. It is in two parts: a brief introductory review or summary that may be used by the Press; and the main report of the commission, comprising about fifty pages. The commission naturally confined itself to a bold general statement of the problem, leaving all investigation into specific questions to be made later in case the commission is continued or some other body is empowered to prosecute the work.

The commission arranged the "main special deficiencies" of country life under six general heads, as follows:—1. Disregard of the inherent rights of land workers: (a) Speculative holdings of lands, (b) monopolistic control of streams, (c) wastage and control of forests, (d) restraint of trade, (e) remedies for the disregard of the inherent rights of the farmer. 2. Highways. 3. Soil depletion and its effects. 4. Agricultural labour: (a) Statement of the general problem, (b) the question of intemperance, (c) development of local attachments of the farm labourer. 5. Health in the open country. 6. Woman's work on the farm.

"The general corrective forces that should be set in motion" were described as a need of agricultural or country life surveys which should take stock in detail of the agricultural and rural conditions, in order that the local facts may be secured on which to build a scientifically and economically sound rural civilisation; the need of a redirected education that shall train the youth by means of the objects with which they associate and the usual

affairs of life; the necessity of better organisation, both economic and social; the need that the country church shall be energised and shall recognise its social as well as its religious obligations; and the need of developing personal ideals in respect to rural affairs and to local leadership.

Incidentally, the commission suggested a number of minor directions in which some of the deficiencies of country life may probably be corrected. Among these suggestions was one for a thorough-going investigation by experts of the middleman system of handling farm products, coupled with a general inquiry into the farmer's disadvantages in respect to taxation, transportation rates, co-operative organisations, and credit; an inquiry into the control and use of streams of the United States with the object of protecting the people in their ownership and of saving them so far as necessary to agricultural uses; the establishing of a highway engineering service to be at the call of the States in working out a national highway method and system; the establishing of parcels post and postal savings banks; increasing the powers of the national Government in respect to the control of public health; the encouragement of a system of educational extension work in rural communities through all the agricultural colleges; the enlargement of the United States Bureau of Education; careful attention to farmers' interests in legislation on national matters. The report makes a number of other suggestions for subsequent studies and investigations.

The report of the commission was published in a very limited edition for the use of Congress, and is not now available for general distribution. The large amount of material that was collected by the commission has not been studied or digested. The whole enterprise awaits further action by the President and Congress.

Communicated by the Correspondent of the Royal Economic Society for the United States, through the courtesy of Professor Bailey.

WASTING ASSETS AND INCOME TAX.

THE recent contribution to this subject by Mr. P. D. Leake, F.C.A.,¹ in a plea for reform in the official method of computing taxable profits, expresses in many of its contentions what must be the opinion of the majority of those who consider the time has arrived for a revision of the income tax system. The separate

¹ "Income Tax on Capital." Gee & Co.

subjects of expenditure at present penalised that have to be reviewed as proper deductions from profits are very numerous, and an enunciation of the principles involved may be the best method of dealing concisely with those upon which there is fair agreement. First, the present subtle distinctions between the schedules of the tax should not be prejudicial to a trader, who, owning premises for trade purposes, is said to bear some expenses *quâ* owner and not *quâ* trader, when trade is actually the whole end in view, and the reason for the charges. Under this may perhaps be included some allowance for depreciation of buildings assessed Schedule A. Further anomalies exist because of the distinction between Schedules D and E. Secondly, the numerous expenses which are necessary to a business, not to earn specially the profits of a given or single year, but to improve or give earning power for a number of years, which, at the same time, have not built up a lasting asset, should be favourably considered. Included in these are costs for renewing capital, legal expenses of partnerships, leases, &c., and certain well-defined preliminary expenses—what may be called the “highest common factor” of initial costs for limited companies. Thirdly, the element of capital in terminable annuities and analogous payments should be distinguished. An examination of the argument in judicial decisions, and in the evidence before Lord Ritchie’s Departmental Committee in 1905, will show that the position has been greatly altered by the introduction of the principle of differentiation between permanent and precarious incomes in the 1907 Budget. Fourthly, the *whole* expenses of getting minerals—where the wasting *corpus* bears income tax—should be allowed.

Much is made of the fact that accountancy and industry were not fully developed in 1842, and too little of the fact that the tax was regarded as a temporary impost. In a temporary tax the object was to raise a revenue with a rough approximation to equality from all, and great regard could hardly be paid to fine questions involving calculations of long-period effects. In many judicial decisions involving the much-criticised interpretation of the word “capital,” the income tax system in expression and intention has been distinguished, almost with regret, from ideal economic conditions, and the lawyers have by no means been under any misapprehension in the matter. Whilst the claim for an amended system has great and growing force, it is only a rough improvement that is possible. An ideal system, taking into account all the fine issues involved in the question of wasting assets and the distinctions between “capital” and “income,” is

out of the question when the administration of the tax is considered.

The position of mineral properties as wasting assets unfairly treated by the tax, is worthy of further consideration. Mr. Leake founds his argument upon the case of a mine purchased outright, probably because it most clearly shows the subject of criticism. But such a case is not by any means the universal one, and an examination of other cases is essential. A landowner, having discovered minerals, wishes to profit by them. He has, broadly, three courses open to him:—(a) To work them himself, and by their produce to realise their "original value"—adopting for a moment terms to suit the idea embodied in the proposed reform—*plus* "profits" (or remuneration for management, enterprise, and capital invested). (b) To lease them and receive the "original value" by royalties and dead rent, leaving "profits" to the lessee. (c) To sell the "original value" outright for one sum, and leave "profits" to the purchaser. Allowing in each case the working expenses, income tax is paid on the whole produce, both "original value" and "profit." In (a) it is borne by the owner. In (b) it is borne on the "profits" by the lessee, and on the "original value" by the owner, because tax is deducted by the lessee from royalties and dead rent. In (c) it is suggested that tax on "profits" is borne by the purchaser, and *also* that on "original value," because the asset represented by the purchase price is finally worthless, and the purchaser has paid tax on the whole product. But is this view of the incidence in (c)—though exceedingly common—the correct one? The mining industry, for most minerals, is subject to free competition. Capital and enterprise in front of any proposed undertaking can take it, or leave it to seek more advantageous openings elsewhere, and so far as their reward is concerned, the industry is, taking the average, fairly in equilibrium with other forms of business. Moreover, the direct purchase method is not the only way of approach, for alternatives (a) and (b) are available. In short, all the conditions are present for a complete shifting back of any exceptional, calculable burdens on profits. Is it to be understood that the purchase price would be exactly the same whether the purchaser had to pay this tax on the wasting asset or not? If the "original value" is generally so closely ascertainable as Mr. Leake suggests, the total income tax to be paid thereon, apart from that on extra "profits," is also approximately known, and to suggest that the real value of the consideration payable in both cases is the same, and yet that the original owner bears the tax under (b)—as he actually does by

deduction—and the purchaser bears it under (c) is almost a contradiction in terms. There must be a very strong tendency for the consideration (c) to be less than the real consideration (capitalised and discounted gross royalties, &c.) under (b) by the lump sum of the tax, which appears to be a special disability to this class of profits. If, however, it be held that the “original value” should not be charged to tax, it would be necessary—to be consistent—for the royalties and dead rent to be exempt under (b), and for a special calculation to be made under (a) for something which represents “original” value, so that tax should be levied only on the balance of “profits”—in short, to tax such of the profits as are “earned,” and to exempt those freely given by nature. But this is surely opposed to the trend of modern opinion, which, so far from specially favouring spontaneous wealth occupying such an exceptional position, is disposed to regard it as capable of bearing an extra burden. It would clearly be possible for minerals to be discovered and wholly worked out in the lifetime of one owner without tax of any kind being paid thereon. There seems to be no valid reason for departing from the old principles by which annual value for rating purposes is determined, nor for altering the existing system under which the burden of income tax really reaches the owner first conscious of the existence of computable mineral wealth.

In his classification, Mr. Leake makes the statement that a leasehold is “not an inherently wasting asset,” but this is surely to confuse the right in a subject with the subject itself. A lease for twenty-one years from 1885 is not a brick-and-mortar property, but a right to its use, and quite independent of the ownership of the right, other things being equal, it must be worth less in the market in 1900 than it was in 1890. It is rightly stated that the administrative difficulty of making allowance for its wasting value is against any change, but it is also important that if the allowance were made, the Revenue would get no *quid pro quo* (as against the larger tax received from a freehold of equal *annual value*) unless tax were collected from the owner upon the lump sum paid as premium or part consideration. But the argument that there is then no hardship on the lessee is not valid. A man buys a business for £1,000, and at the end of twenty-one years, on the expiration of his lease, sells it for the same sum. The whole amount paid for the use of the premises is a fair deduction in computing the total profits of the period, but if he paid £1,000 premium he has not recovered tax thereon (by deduction), and has borne the duty himself on a real expense.

It may be urged that the argument as to the shifting back of the total tax in the case of a mine is applicable here, and that the consideration he pays to go in is really *less* than it would have been by the total tax exceptionally suffered. But the cases are quite different. The use of land and buildings is a common requirement of all business, often with urgency as to time and place, and the owner is generally in such a superior position, especially in the renewal of a lease, that the conditions are not favourable for really shifting back the burden to any extent.

The law and practice have been much modified from time to time with regard to their application to the wasting asset, machinery and plant. Mr. Leake, in throwing upon surveyors of taxes the blame of disallowing properly measured "wear and tear" charges and substituting their own calculations "upon an arbitrary percentage off the reducing balance of cost," refers to that method as "altogether wrong in principle," and implies that it is not one generally recognised in the world of commerce and accountancy. But this method of allowing upon the "written down value," and not upon the original cost, is not an official invention, but is very widespread indeed, being almost universal, for instance, in the printed accounts of the cotton industry. Any method is arbitrary to some extent, but that this is "wrong in principle" is debatable. The arbitrary element can be reduced to a minimum by close attention to the facts relating to the *average* "life" of the machinery in question. Neither method gives a true result at any given stage in that life. It is beyond human ingenuity to fix a rate that will, over a wide number of similar assets, always make the balance-sheet value correspond with the facts, and uniformity of practice is essential. The suggestion that the auditors' and valuers' recommendation annually should be accepted, regardless of such uniformity, because it is checked by the shareholders' desire for dividends, is based too much on public company experience, and ignores the wide field of private enterprise where accounts can be submitted for tax purposes, and there would be no limit to claims that could be urged. The "prime cost" method is not inapplicable where the original subject—such as a ship—is not much affected by subsequent addition, for, a record being kept of annual allowances, the allowance ceases when the asset is wiped out. However carefully an average life is determined, some ships must exceed that average, so that we have the anomaly of a vessel written down to nil on paper sailing at an obvious value on sea. Moreover, if at this stage such a

vessel is sold, and still used, the arrangement of wear and tear allowance with the purchaser—who naturally wants one—is a matter of difficulty where the full cost has already been allowed to the vendor. The “written down value” method has at least the merit of never losing the asset entirely, and it can be arranged so that over a vast number of cases the value is written down to a nominal figure in the same time that the machine itself reaches a nominal value. Where there are constant additions it obviates the necessity for a record that would become cumbrous and complicated, for it is only necessary to record the value of the previous year and to add the new expenditure. It may be observed that neither the officials nor the Board of Inland Revenue are the final authority in such matters. In most of the staple industries the rates in force have been approved by the *District Commissioners*, who have usually wide experience themselves of the industry, and against whose decision in the matter of a rate per cent. the officials have no appeal. It is necessary to consider whether a diminished value is value as a saleable asset or as a producing agent—two connected but by no means identical things, in the present state of industry, where producing capacity may be little impaired though saleable value is poor because of recent improvements in type. In any case, with the present method adjusted and the allowance for obsolescence, machinery as a wasting asset has full treatment in the majority of cases. Except in cases of hopelessly declining businesses, the allowance of renewals instead of wear and tear for furniture, &c., meets the case, and could act slightly to the advantage of private traders who had, in renewal, gradually, though almost unconsciously, improved their type of stock out of profits.

Before leaving the subject of depreciation, it is important to note that the allowance is not admitted as an ordinary trading expense deductible before arriving at the balance of profit and striking the average, but is taken off *from* the average. So, in a typical case where, from bad years, an average fell to £500, and the proper allowance for wear and tear was £1,000, the assessment stood £500—£500 wear and tear (duty “nil”), and the balance of £500 was never given credit for (or, if the average was a loss, no part of the £1,000 was ever obtained). This constituted a real grievance, and the Finance Act of 1907, in allowing such unused balances to be carried forward indefinitely to future years, until they were exhausted, gave the first real recognition to the fact that the tax has “come to stay,” and that its effects “in the long run” must be considered. But owing to the fact that

"wear and tear" is not a working expense but an allowance, we have a very curious and somewhat anomalous result. Depreciation, though admittedly real, is not susceptible of exact measurement, but is an actuarial calculation, and yet it now stands in a far superior position to ascertained and definite expenses incurred in hard cash. Such expenses may have the effect of giving a definite known loss for a number of years. If such years of loss are isolated, they are duly worked off, in the averages, against years of profit, but if they occur in succession the taxpayer may lose the "benefit" of some of them in his averages. This may be seen by taking a hypothetical case with six years' losses in succession. Whether the aggregate tax over a series of years exceeds tax on the aggregate profit depends upon this isolation or succession, and the anomaly could only be rectified by allowing a *minus* average (or average loss) to be carried forward against future average profits. At present relief is granted only where taxed income is received from other sources, and this is by no means equivalent. Thus depreciation of machinery now stands in a satisfactory and even favoured position, and it is no longer upon this line that the main criticism of the tax can be directed.

J. C. STAMP

AUCTIONEERS AND AUCTIONS.

It is very easy to become an auctioneer: the man whose ambition it should be to say "Going, going, gone!"—I say "should be" because this popular expression is unknown to auctioneers—has only to pay £10 to Somerset House for his licence and to invest a few shillings in the indispensable tool, and there he is—a full-fledged knight of the hammer! At all events, this is how I commenced business. But I had a fair knowledge of what I intended selling, had attended several hundred auction sales, and had received a good all-round business training.

Soon after I became an auctioneer I joined the Auctioneers' Institute, membership of which is useful and desirable in many ways: it affords a strong presumption of competency and integrity; at the periodical meetings papers on a variety of subjects are read; the Council includes men of wide professional and legal knowledge who are most generous in placing time and labour at the disposal of members in any sort of difficulty. It may be mentioned that the Council is also imbued with a very strict sense of discipline. Woe betide the member who has perhaps been rather easy-going in the interpretation of one of

his "conditions of sale," to the possible detriment of one of his vendors, who promptly lodges a complaint with the Council. He will probably be lectured and chided until he feels more like a naughty schoolboy than an independent business man. Still, he knows perfectly well what a mockery of justice a civil action frequently is, not to speak of the terrible loss of time and money involved; and he regards as infinitely preferable a jury of experts (not law-court "experts"), even if they are a little inclined to be fair to his accuser to the point of partiality.

The Auctioneers' Institute interests itself in raising the status of the profession, an ambition that might be misunderstood by people who are not aware that the trader-auctioneer—the man who is more or less interested as a dealer in what he sells by auction—is regarded with suspicion by his professional brethren. The typical Londoner has long ago decided that refinement and taste are in reality more a question of income than of occupation; and he acts accordingly: What the auctioneer means when he talks about raising the status of his profession is not that the dirty distraint work (which, by the way, only falls to the lot of men connected with certain classes of business) should be shifted on to other shoulders, but that a man acting in a fiduciary capacity should not only be fully qualified in every way for the work he undertakes to perform but should also not be personally interested either as a buyer or a seller in his own sales. It is the question of the inside and outside stockbroker over again. There have apparently always been a good many auctioneers possessing both wealth and standing; but it is comparatively recently that there has generally existed the feeling that professional auctioneers must organise themselves for individual advancement and mutual protection.

One circumstance in connection with auctioneers has frequently struck me as rather remarkable: although their number is considerable, and although it is so easy to become an auctioneer, I do not remember a single failure of any importance. London Stock Exchange failures are uncomfortably frequent; the abuse of trust funds by solicitors ended in interference by the Government: but auctioneers seem to have a most wholesome sense of what acting in a fiduciary capacity should mean. I mention this because in my opinion the various corporate bodies could with great advantage to their members and their members' clients form a guarantee fund by compelling each member to contribute a certain percentage of his gross professional income to a common fund, the money being invested and each member's unrequired

portion being returned to him on resignation or retirement; and an idea of this sort would apparently be easy to carry into practice where the number of failures is small. One of the many questions now agitating members of the London Stock Exchange is that concerning the payment of commission to outsiders; and one of the reasons why bankers, for instance, share the commission of "House" members is that bankers' clients who desire to buy or sell stocks and shares frequently prefer to have a bank's guarantee behind that of the stockbroker.

The strong revival in various quarters of the corporate spirit is so important that it must be my excuse for still further deferring a few remarks about auctions themselves.

In my opinion one factor making for combination is the readiness with which people nowadays bring actions against other people for damages. Personally, I thoroughly sympathise with this tendency: it makes for efficiency and good service. Still, it has drawbacks from the producer's point of view, and he feels the need of protection and support by and from those who understand his position and its difficulties: hence the comparatively novel sight of business rivals meeting together in a large room, listening, prior to a chat and a cup of coffee, to a paper by a clever barrister explaining, among other details, what "reasonable care" (in making a valuation, for instance) means. When a man who receives a few guineas for a valuation may subsequently find himself involved in an action for damages amounting to thousands of pounds, people interested become anxious to find out exactly where they would stand if they had to face a judge and jury under such circumstances. It is sometimes very difficult to value a thing. An able valuer knows what a thing "ought to fetch," but what it does fetch often astonishes him more than anyone else. Probably our jack-in-the-box Bank rate adversely influences "market sentiment" a good deal: speculators are encouraged one moment and even investors and other ordinary buyers discouraged the next. It is disgraceful that our greedy banks should collectively hold in gold little more than 5 per cent. of their liabilities on drawing accounts: their individual balance-sheets do not disclose the true position for many reasons, chiefly because a large part of what they regard as cash is really represented by various securities held by the Bank of England.

Now, when people of the same trade or profession form any sort of association it is safe to assume that sooner or later there will be some talk, at any rate, about insufficient remuneration: the average

producer is a born Protectionist, just as the average consumer is a born Free Trader! Anyhow, there has been the feeling among many members of the Auctioneers' Institute that a minimum fee or commission should be charged for certain services. There is no pressure of any sort that I am aware of : simply a rather general feeling that, although each member should please himself in the matter, no one should go below a recognised limit. I cannot attempt to discuss the tendency here ; it does not do to assume that it is bad ; I presume one effect a minimum rate has is to weed out weak, independent members. But it is a fact that this tendency is growing ; and I therefore make no excuse for again referring to the London Stock Exchange, especially as it is sometimes mere chance whether an investment is sold by an auctioneer or through a stockbroker. The following extract from an article in the *Financial News* explains itself ; the first two members seem to be vulgar Protectionists, while the title "philosophical pessimist" would seem to fit the third member :--

"Let us have a fixed minimum, I say," remarked one broker, vehemently. "If members want to charge a high rate, let them do so ; but there ought to be a minimum, which will prevent us from undercutting each other for farthings. It's a game of 'dog eat dog' now, whereas if we had a fixed rate, below which no one must go, then everybody would have a fair chance. What is more, it would bring back to the 'House' the influence of personality. A man used to be able to get business on the strength of his friendships and his personal influence ; but nowadays a client goes where he can get his work done cheapest."

"A fixed minimum," joined in another member, "would enable us to compete against the German banks, who will work almost for nothing."

In Shorter's Court still another opinion was obtained. "It's no use making a fixed minimum. The foreigners would be sure to undercut us by some means or other. Besides, how are you to check them? Only by instituting an inquisitorial system, which no Committee dare assent to. No ; leave us as we are."

Now a few words about auctions. In a well-conducted sale the strictest impartiality is exercised by the auctioneer as between the vendors and the buyers, the vendors individually, and the buyers individually. This is more difficult sometimes than it appears : impartiality may be active as well as passive ; and this is the case when any buyer or seller tries to exceed the bounds of fair play in the desire to buy cheap or sell dear. It must be

remembered that the sale attendance frequently includes both dealers and private buyers, and that the former would be very pleased if the latter bought from them instead of bidding against them. As a matter of fact, the only collusion that takes place is generally of a comparatively harmless kind; even two dukes would probably "toss for it" if it were a question of competing at auction for a handy little sporting property that each badly wanted and that each was prepared to pay a more or less fancy price for; the average auctioneer likes to obtain good average prices for what he sells: high prices will drive some of his useful buyers away because they have wasted their time, and low prices will cause property and effects generally to pass his door by.

Anything sold by auction will have a tendency to fetch more than the average dealer would give for it and less than the average dealer would take for it.

The great drawback to the auction from the possible purchaser's point of view is the uncertainty as to whether or not time will be wasted in examining and bidding for something that he may be unsuccessful in obtaining: it is therefore obvious that many people for this reason prefer to pay rather more for anything purchased by private treaty or from dealers. But on the other hand, there are so many people nowadays who are chiefly anxious to get or to pay "a fair price," and who regard a properly conducted auction sale as the best test of current value.

When I first held auctions I had a fixed idea of the justice of a sliding scale of commission, but soon found that simplicity was preferred to abstract justice. I therefore quickly abandoned my sliding scale in favour of an all-round rate. Later experience suggested that a uniform rate was fairer as well as more simple than a de-gressive rate: the question of joint cost as between different vendors is in practice most complicated.

I always mentioned my charges in advertisements, and was rewarded when an American said to me: "I have come to you, Mr. Plumridge, with this business because you are the only philatelic auctioneer in the 'Post Office Directory' that states his charge in black and white. It is quite as easy for a man to say what his charge is as to say 'particulars of charges on application.'" This practice has grown during the short time which has elapsed since I gave up auctioneering, and in fact seems to be extending in all directions where it has hitherto been considered "unprofessional."

Sales by tender are frequently conducted by auctioneers, but

they seem to be dying out, as the consumer does not apparently understand them, and anyhow declines to make use of them. Had the British Government invited tenders for its loans during the South African War,¹ the issues would unquestionably have fallen into the hands of a few clever dealers, who would probably have made a much larger profit than the public made (on paper).

In conclusion I might advance the opinion that the auctioneering profession is a growing one: so many people—including an Oxford head-master and a parson (I speak with bated breath, but some persons are terribly economic)—discontented with their present vocations, have asked my advice as to its prospects.

H. WILFRED PLUMRIDGE

MUNICIPAL ENTERPRISE IN GERMANY.

At the September meeting of the Verein für Social Politik, Prof. Fuchs, of Tübingen, read a paper on municipal undertakings, describing conditions in Germany exclusively, and the conditions in other countries pretty fully. Professor Fuchs mentioned no less than eighteen different departments in municipal undertakings which might be found in German towns. In the case of electricity works, he reported that only 8 per cent. of the municipalities have their own works, but that the number is growing. It is of interest to note that, on the whole, profits from electricity were not so great as those from gas, especially in the small towns. In the case of public slaughter-houses, again, municipalities held a monopoly, not in order to reap profits, but solely for hygienic reasons. A few figures will show the extent to which municipal slaughter-houses exist. Of forty-one towns in Germany with over 100,000 inhabitants, thirty-nine have their own slaughter-houses; of forty-four towns with between 50,000 and 100,000 inhabitants, forty-three have their own; and in 134 towns of between 20,000 and 50,000, there are 101. As to trams, it would seem that at present municipal tramways are not as extended as the Society for Social Reform would like, but a strong tendency towards municipalisation is showing itself. Finally, of all municipal undertakings in Germany, the water-works appear to be the most popular, and in every case they are very profitable concerns.

The municipal movement was of later growth in Italy than in Germany, Austria, Switzerland, or England, for in Italy the

¹ See Prof. Bastable's *Public Finance*, (1903 ed.), p. 641.

national idea held possession of men's minds. But when the nation got its independence, it was only to be expected that municipal problems would become pressing; and, influenced no doubt by the ideal of the ancient city states no less than by that of the mediæval republics, the League of Italian Municipalities was formed in 1901. The influence of the Socialists in most of the municipal bodies made itself very strongly felt at first; but now men of all parties agree about the extension of municipal undertakings. At the present time, Italy stands on a level with most of the States of Western Europe in this respect. The only exceptions to the general rule are France and Belgium, where the municipalities have little else but their own waterworks.

Summing up, Prof. Fuchs came to the conclusion that no general rule could be laid down. People had accused their Society of helping forward Socialism. For his part, he believed that every case should be considered on its own merits, and wherever a municipal undertaking appeared to make for social welfare, it ought to be encouraged and advocated.

It was just this aspect of municipal undertakings that the next speaker, Dr. Mombert, of Freiburg in Breisgau, dealt with. He pointed out that the municipality, in its capacity both as consumer and producer, could bring influence to bear on the condition of the working classes. As consumer, for example, a municipality can insist on the best possible treatment of workers employed by those firms with which it deals. And it can itself be a model employer. As to profits, no legitimate criticism can be levelled at municipalities when they make it their aim to increase these as much as possible. At the same time, it ought always to be borne in mind that, from the economic point of view, the race for profits ought not to be the primary object of municipalities. It may lead to over-municipalisation, and that in its turn may check advances in technical knowledge, which, after all, tend to the advantage of the whole community.

Dr. Mombert, in a second paper, went on to consider one aspect of his first paper rather more fully. He dealt with German municipalities as employers of labour, and drew the attention of his audience to the fact that the number of municipal employees was growing. In 1907 there were 120,000 of them in Germany, Berlin having 17,893 and Hamburg 15,192. Three great considerations were generally found in the policy of the German municipalities, with regard to the treatment of their workers:— (1) Regulations were laid down for all workers; there was no special treatment of workers in particular industries; (2) efforts

were made to give workers a certain stability in their employment, thus removing the curse of uncertainty; (3) wages were fixed, not necessarily according to the market rate, but on a scale. Furthermore, weekly and monthly wages took the place of payment by the hour or the day; better facilities than in private concerns were given to make the grievances of the workers heard; and periods for notice on either side were fairly long.

It was in their wages policy that municipalities were best able to show a sense of their responsibility. Dr. Mombert laid stress on the fact that municipalities now pretty generally recognised that in fixing a minimum wage they must be actuated by different motives from those which govern private concerns. They must be guided, not so much by the market rate, but by what is an efficiency wage. Hence the cases where differences were made between wages of married and single men. In theory it all sounded very well, but in practice there was room for improvement. To take but one instance. For 1902 the average wages of municipal employees was 3.28 marks a day; for 1907 they were 3.76 marks, thus showing an increase of 14.6 per cent. This increase is not great, and when the real wages are considered, the increase shrinks still more, since prices rose in the period given. On the whole, Dr. Mombert seemed to think that, under this head, the condition of the workers under municipalities was no better than of those in private concerns. The same held good with regard to hours of labour. The ten hours day was still the rule, though it must be added that in the period from 1902 to 1907 the number of workers with a less than ten hours day had doubled. But their actual number was still very small. In 1907 one-half of all municipal employees in Germany still worked ten hours or more each day.

Despite one or two encouraging facts to which Dr. Mombert alluded, his summing-up showed that while on paper the condition of the workers under municipalities was quite good, in reality it was often worse, and but seldom better, than in private undertakings, since the paper schemes were never fully carried out. Accordingly, municipal employees were forced to organise themselves into Trade Unions of their own. Their end in view was to improve their lot; the means to that end, strikes. Dr. Mombert sympathised with these unions, remarking that they were quite justifiable under the prevailing conditions.

Views such as these were not likely to be allowed to pass without criticism; the discussion, therefore, which followed was most interesting. All schools of thought made themselves heard.

To begin with, there were speakers like Dr. Lücke, who defended the municipalities, excusing their slackness by asserting that they lacked the means to bring about the improvements they would all wish to see. As it was, local rates were high enough; it would not be good policy to make them higher. Incidentally, Dr. Lücke pointed out that municipal loans were not very popularly received in stock exchange and banking circles. But Dr. Lücke's plea did not satisfy Herr Mohs, the representative of the National Union of Municipal Employees. He complained bitterly of the conditions in municipal employment, especially that wages were lower than in private undertakings; and blamed the municipalities for their policy in this respect. His facts about wages were, indeed, contradicted by other speakers, but on the whole he made out a good case for his position. This was strengthened by the speech of Dr. von Fürth, of Vienna, who stated that before workers were employed by the Vienna municipality they had to give their word of honour that they were not social democrats or German nationalists!

So far the discussion had been fairly calm, but Prof. Alfred Weber, of Heidelberg, spoke with a good deal of feeling. He deplored the necessity of a bureaucracy in modern times. He admitted that it was inevitable: it was one of the results of the principle of the division of labour. But he was concerned by the fact that very often the bureaucratic machine crushed out personality; that the man of character and principles seldom succeeded in its service. Moreover, the political parties had got hold of the bureaucratic machine, and from their influence it was most essential that it should be freed. As to State Socialism, he was of opinion that it could not be avoided: it was a necessity of development. To illustrate his view, he mentioned the case of the municipalities in the Rhineland and Westphalia, which had to face the question, Shall their tramways become a private monopoly or shall they take them up themselves? Of course, they adopted the second alternative. And once the municipalities become employers of labour, their employees must have the right to combine, and even to strike. Strikes, in his view, were an absolute social necessity.

• There were many replies to Prof. Weber, the most important being that of Prof. Adolf Wagner, who, despite his three score years and ten, is as full of youthful enthusiasm as ever. It had been the aim of his life to see the spread of municipal undertakings, and he stood there and gave expression to his satisfaction. But his enthusiasm is always followed by sound common sense, as

those know who have worked with him. He admitted that municipal undertakings had their weak spots. But so had most human institutions in this world. The question was, Had they more weak spots than private undertakings? He held most strongly that the advantages were all on the side of municipal undertakings. It was the same with bureaucracy. No doubt it had its weaknesses. But it also had its excellences, and he reminded his hearers of its record in the past. Both the Hohenzollerns and the Hapsburgs had built up their States with the help of a splendid bureaucracy no less than with that of their armies. But in the present also its record in Germany was good; certainly better than in America, where the corruption of private officials was a by-word.

The optimism of Wagner was not shared by Prof. Max Weber (brother of Alfred Weber), of Heidelberg. He doubted the excellence of German officials. So did Prof. Schulze-Gevernitz, who expressed his complete sympathy with the views of Alfred Weber, but regretted that Weber had not suggested any solution. For his own part, he believed that it was all a matter of education. In England, for example, things in this respect were better than in Germany, because the English capitalist receives a better education than the German capitalist.

M. EPSTEIN

JAPANESE FINANCE.

I.—INTRODUCTORY REMARKS.

NOWADAYS trade depression cannot long remain purely local, but has a tendency to become universal, affecting more or less the rest of the world. As an instance, the last panic which prevailed in the United States keenly affected Japan. She had not only to suffer with other countries, but perhaps harder than others, as the crisis came unfortunately to her before she had thoroughly recovered from the far-reaching effects of the great Russo-Japanese War.

She, however, met her commercial and financial trial as bravely and patiently as she had the war. Not only did she come out unscathed from the trial, but with a firm determination to rebuild her finance upon a more solid basis. She at once went in for a substantial reduction of expenditure and debt in order the more quickly to heal the effects of the war and the panic. This fact is worthy of notice, especially at the time when

advanced nations, such as England, Germany, and the United States, are going in for expensive military and naval preparations. The study, therefore, of Japanese finance may be of interest, not only to herself, but to the outside world as well.

II.—FINANCIAL PROGRAMME.

In July, 1908, the Saionji Cabinet having resigned, Marquis Katsura became Premier and Minister of Finance, laying the utmost importance upon financial reform. An entirely new scheme was drawn up by Marquis Katsura, the general outline of which is as follows :—

(a) Ordinary expenditure should be covered by ordinary revenue, and the works which have been defrayed by the issue of bonds in former financial schemes should, if necessary, be continued by transferring the expenses to the account of ordinary expenditure, thereby avoiding the issue of new debt bonds except in case of special works of a productive nature such as the Formosan Public Works.

(b) Retrenchment should be made in all branches of administration, especially in the army and navy.

(c) In case absolute reduction of expenditure cannot be effected, it should be spread over a greater number of years, lessening thereby the amount of annual disbursement.

(d) In order to maintain the price of national debt, bonds to the amount of at least 50,000,000 yen should be redeemed annually.

(e) In order to make the railway finance independent and self-supporting, special "*comptabilité*" should be established.

With these conditions in view, the Budget for 1909–10 was compiled and presented to the Diet, which passed it with a very slight modification. Compared with those of the preceding fiscal years, the figures thus stand :—

	REVENUE.	
	1909-10. yen.	1908-09. yen.
• Ordinary.....	470,354,136	440,702,485
Extraordinary	48,575,147	149,031,464
Total... ∴ . . .	518,929,283	589,733,949

N.B. —As the railway profit is to be excluded, as explained above, 589,733,947 yen for 1908-09 remains after deducting 37,054,470 yen of the railway profit of the year.

	EXPENDITURE.	
	1909-10.	1908-09.
	yen.	yen.
Ordinary.....	404,700,516	396,134,085
Extraordinary	114,220,595	165,460,799
Total.....	518,921,111	561,594,884

N.B.—Here also the railway loan service of 32,102,792 yen and the railway funds of 33,090,793 yen are deducted from the total expenditure amounting to 626,788,419 yen in the Budget for 1908-09.

The amount to be transferred to the National Debt Consolidation Fund in the Budget for 1909-10 is over 153,100,000 yen from the general account, and over 29,900,000 yen from special "*comptabilité*" of railway, making the total of over 183,000,000 yen. Of the above total, the sum to be appropriated for the redemption of public bonds is 50,800,000 yen.

The gross profit from the Imperial Railway for 1909-10 is over 38,100,000 yen, of which the sum to be transferred to the National Public Debt Consolidation Fund for the payment of interest on railway loans, &c., is over 29,900,000 yen. Thus the net profit stands at over 8,100,000 yen. Of this sum over 600,000 yen is laid aside as reserve, and the balance of over 7,500,000 yen is to be appropriated for the construction and improvement of railways. As the expenditure on construction and improvement is estimated to be over 29,100,000 yen, the deficiency of 21,600,000 yen is to be covered by means of loans.

III.—FOREIGN CAPITAL.

As stated in the previous article,¹ after national loans issued abroad to meet the pressing requirements; municipal loans of Tokio and Yokohama; the debentures of the Hokkaido Tanko Railway Co., the Kansai Railway Co., and the South Manchurian Railway Co., as well as the shares of the Industrial Bank of Japan, nothing much was done in the way of "importation of foreign capital" for some time. The Imperial Government has firmly abstained from raising any new loan since 1907, the last one being issued in March, 1907, amounting to £23,000,000.

The first foreign loan in the year 1909 was that of the Yokohama City, raised in February, amounting to 648,000 yen, for the purpose of enlarging the gas enterprise of that city. The price of issue was 95, and the interest 6 per cent.

In April, 1909, the Osaka municipality loan of £3,084,940 was issued in London. The conditions were as follows: Price

¹ March number of the ECONOMIC JOURNAL for 1908.

of issue, 97; interest, 5 per cent.; term, 30 years, of which the first 10 years was to remain unredeemable, and the first charge on the revenue from the harbour, the electric tramway, and the waterworks.

The issue of the Nagoya City loan came next in May, 1909, amounting to the sum of £800,000, the conditions being: Price of issue, 95½; interest, 5 per cent.; term, 35 years, of which the first 8 years was to remain unredeemable, and the first charge on the revenue of the city water rates.

The City of Kyoto, then followed with the issue of a loan of 45,000,000 francs in Paris in July, 1909. The price of issue was 99; interest, 5 per cent.; term, 30 years, of which the first 10 years was to remain unredeemable, and the first charge was on the revenue of the city, from water rates and tramways.

The last municipal loan floated abroad was £716,500 of the Yokohama waterworks loan issued in July, 1909. The conditions were as follows: Price of issue, 98; interest, 5 per cent.; term, 45 years, of which the first 15 years was to remain untouched, and the first charge on the subsidy of the National Treasury and the revenue from water rates.

As for private companies, besides the £2,000,000 debentures of the Industrial Bank of Japan issued in London and Paris in December, 1908, and £4,000,000 debentures of the South Manchurian Railway Co. issued in June and December, 1908, there are many. But in order to be brief, outstanding foreign capital investments are summarised as follows:—

From England:—

Kind of companies.	No.	Amount. yen.
Banking	1	10,000,000
Railways ..	1	80,000,000
Tramways	3	6,300,000
Shipping	1	2,000,000
Mining	1	6,000,000
Spinning	3	3,100,000
Gas enterprise	1	3,000,000
Paper industry	1	1,500,000
Oil industry	1	1,000,000
Total	13	112,900,000

From France:—

Banking	1	10,000,000
Spinning	1	400,000
Weaving	1	250,000
Total	3	10,650,000

From the United States:—

Shipping	1	2,000,000
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IV.—FOREIGN TRADE.

Year.	Exports. yen.	Imports. yen.
1905	321,533,610	488,538,017
1906	423,751,892	418,784,108
1907	432,412,873	494,467,346
1908	378,245,673	436,257,462

During these four years the imports exceeded the exports, except in the year of 1906, and the balance appears at first sight rather unfavourable. But a careful and detailed investigation of the situation ought to remove uneasiness, as the chief bulk of imports consists of machinery and raw material, while that of exports consists more or less of manufactured goods, thus proving that Japan is gradually transforming herself from an agricultural into a manufacturing country. Moreover, in 1908 the general depression, the panic in the United States, and the fall of silver in China, have caused the export business of Japan to be very inactive, thus making the year quite an abnormal one.

V.—MONEY MARKET.

After the buoyancy which prevailed till 1907 there came a reaction, and the spirit of enterprise gradually subsided, giving rise to more supply and less demand for capital. This is proved by the following table of both bank and market rates of interest during the last five years in Tokio.

BANK RATE.

		The Bank of Japan.	
		Highest per cent.	Lowest per cent.
1905		8.0	7.3
1906		8.0	6.6
1907		7.3	6.6
1908		7.3	7.3
1909	July ..		6.57
„	August ..		5.84

MARKET RATE.

1905	.....	12.8	5.8
1906	..	12.8	5.1
1907	.....	11.7	5.8
1908	.....	12.8	6.6
1909	July	12.0	5.8

Frugality and saving habits of the people also had to do with the increase of funds, as appears from the statistics of the deposits in Tokio associated banks, the deposits of the Osaka associated banks, and the Post Office deposits during the period 1903-09. In that period of half-a-dozen years the deposits in those banks has almost exactly doubled, while the Post Office deposits have more than trebled.

VI.—WAGES AND PRICES.

Wages in Japan are steadily rising. This is well shown in the following table :—

	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
	yen.	yen.	yen.	yen.	yen.	yen.	yen.	yen.
Farm labourer.....	0·295	0·320	0·323	0·313	0·380	0·320	0·340	0·360
Tailor	0·558	0·620	0·598	0·573	0·590	0·640	0·680	0·740
Shoemaker	0·473	0·505	0·538	0·535	0·560	0·570	0·580	0·580
Confectioner ..	0·298	0·315	0·340	0·358	0·330	0·340	0·330	0·360
Carpenter	0·535	0·593	0·583	0·588	0·590	0·600	0·650	0·750
Plasterer	0·540	0·590	0·593	0·605	0·600	0·600	0·650	0·760
Tile Roofer	0·585	0·640	0·635	0·650	0·640	0·650	0·730	0·870
Printer	0·340	0·380	0·370	0·363	0·360	0·380	0·390	0·440
Blacksmith	0·475	0·488	0·515	0·523	0·550	0·550	0·570	0·650
Cartwright.....	0·465	0·498	0·488	0·485	0·470	0·510	0·520	0·630

According to the above, it will be seen that the rate of rise is very considerable. But it is by no means unreasonable, as the cost of living has considerably increased. In order to prove these facts, we must examine what changes took place in prices. The average of index numbers of prices of goods of daily consumption are as follows :—

	1900.	1907.	1908.	1909.
January	100	125·75	129·64	117·54
February	100	126·55	128·32	118·54
March	100	126·79	126·57	118·20
April	100	127·61	125·76	118·09
May	100	127·78	124·89	118·82
June	100	127·30	122·96	118·75
July	100	126·43	122·70	—
August	100	128·12	122·85	—
September	100	132·54	122·91	—
October	100	133·61	121·95	—
November	100	132·00	120·46	—
December.....	100	130·66	117·54	—

Although the fall has set in lately, when compared with 1900 the rise of general prices is a thing worthy of notice.

VII.—CUSTOMS DUTIES.

As our customs tariff was fixed nearly half-a-century ago, at the time when our ports were opened to the outside world, it is naturally of a very unfair nature and without any underlying principle. In 1880 customs house regulations were enacted, but they were still subject to the old treaties. Since then some new treaties have been concluded, and the Law of Automatic Tariff was enacted in 1897 (coming into force from 1899), as well as the Law of General Customs Duties in 1899, thus establishing the distinction between automatic and conventional tariffs. Again, in March, 1906, the Law of Automatic Tariff was revised, coming into force in the October of that year. But still unfairness and

anomalies remain, and reasonable amendment is to be expected in 1911, when the term of the present commercial treaties with foreign countries expires.

The necessary steps for a thorough investigation of the subject are being taken both by the Government and business men. The chief points of discussion now are, naturally, whether to adopt free trade or protection, and whether to look to the interest of the consumer or the producer, &c., &c. But the general desire seems to be for fairness and moderation, avoiding extremes.

VIII.—CONCLUSION.

From what has been mentioned above, it is clear that the country is speedily recovering from her past unfavourable condition, and that her finance is conducted with the same skill and wisdom as it was during the war. The general outlook seems to be fair and healthy, and if the coming rice crop turns out to be rich, a sure recovery of home trade will set in, and, with the low rate of interest, a spirit of enterprise will be called forth.

The late war was indeed a hard trial for Japan, and it was feared that it might take many years before she would be able to set things right again. But, thanks to the ability of her statesmen as well as to the prudence of her people, she was able sooner than was expected to make good the after-effects of a great war by which economy is apt to be disturbed and national finance to be deranged.

If nothing unforeseen happens, the complete recovery from her past wounds will not only be near, but she will be able to show to the world that, after all, her aspiration and ambition lie in the peaceful works of commercial and industrial progress.

JUICHI SOYEDA

(Correspondent for Japan
to the Royal Economic Society)

Memoranda by Individual Commissioners on Various Subjects.

(Royal Commission on Poor Laws and Relief of Distress.
Appendix. Vol. XII. Cd. 4983. Pp. iv+461. Price
5s. 7d.)

THE four members of the Commission who have contributed to the interesting volume before us are Mr. C. S. Loch, Professor Smart, Mrs. Sidney Webb, and the Right Hon. Charles Booth.

Their contributions vary both in length and importance. That of Mr. Loch comes first, and is far the shortest of them. It deals with Poor Law history from the 43 Eliz. to the Amendment Act of 1834, containing a short account of the provisions of the Elizabethan Act, and a sketch of the "development of thought and method" in Poor Law Administration up to 1832. Professor Smart more or less takes up his parable where Mr. Loch lays his down. He opens with an analysis of the Act of 1832, and a section on the Principles of 1834. The third section treats of the work of the Poor Law Commission by taking each annual report in turn and commenting upon it. This method has the advantage of showing the gradual progress of the work from year to year. But when he comes to the Poor Law Board (1847-1871), he deals with each phase of Pauperism in turn, beginning with the ordinary pauper, in whose case he distinguishes four administrative periods. The other subjects dealt with are:—Education of Pauper Children, Medical Treatment, Emigration, Lunacy, Vagrancy, and Irremovability. Finally he devotes a last section to the "First Six Years of the Local Government Board," and the Crusade against Out-Relief in the 'Seventies.

Mrs. Webb's object in her memorandum, as she explained in her introduction to that part of it which has since appeared in book form, is to enable the position and constitution of the Poor Law to-day to be fully understood by the aid of the writing of its history. The first part deals with the Policy of the Central Authority from 1834 till to-day. The opening chapter, entitled "The Revolution of 1834," covers both the Report of 1832 and the Act of 1834, and further chapters are given to the Poor Law Commissioners and the Poor Law and Local Government Boards; and in each case a short treatment is given to each separate problem, or class of paupers, in turn. The second part will, perhaps, prove even more interesting. Its subject is the "Medical Services of Poor Law and Public Health Authorities" in various aspects. After an historical introduction, Domiciliary, and Institutional, Treatment of the Sick under the Poor Law are first taken, then the Public Health Services, and, finally, a few short chapters are given to the Conflicts of Rival Authorities, Voluntary Agencies and Recommendations. The last two sections deal with the history of Poor Law Administration in Bradford and Poplar respectively.

But the Memorandum signed by Mr. Charles Booth will, perhaps, have the greatest interest, because it is the first time that he has set forth his views on Poor Law Policy as a member

of the Commission. For it will be remembered that ill-health compelled his retirement from it during the course of the inquiry. But we are now given the author's views on the Reform of the Poor Law. The memorandum is divided into two sections: Poor Law Unions, and Areas of Poor Law Administration. Each of these is accompanied with an abstract of statistics, and the latter with two maps. The statistics belonging to section A deal with each union in turn, and the other abstract shows the counties with their administrative divisions, numbers of paupers and number of adjustments likely to be required by the proposed new county authorities (Table I.), and the grouping of the unions for the proposed Poor Law Boards (Table II.).

Turning to the memoranda, the second is very short (two pages), but the first (Poor Law Unions, England and Wales) is fuller, and contains a sketch of the author's own proposals. It has three sections, "The Case for Reform," "Changes Advocated," and "Comparisons and Arguments," in addition to the statistical information. The actual proposals are:—Larger areas, complete institutional organisation; more control over coming-in and going-out of inmates; closer restriction, with more uniform administration, of out-relief; and recognition of distinct spheres for the Poor Law, Public Health, and Voluntary Action in the matter of sickness.

N. B. DEARLE

Report of the Municipal Taxation Committee for the United Provinces of Agra and Oudh, 1908-09. Pp. 124.

THIS report gives us a most interesting picture of municipal finance in its undeveloped state. In the United Provinces the revenue from octroi is still the main resource of most municipalities, and it was the obvious disadvantages of this source of revenue which gave birth to the inquiry outlined in the present paper. Accordingly we find that the subject of octroi taxation occupies the greater part of the report. In India, as in other countries, the early history of octroi presents two features which may still be found surviving here and there. These features are (1) that octroi was originally an imperial tax upon which the residents of the town had no claim; (2) that octroi began in the form of a "terminal tax"—that is to say, a tax on all goods entering the town, without any attempt to refund the amount paid on goods subsequently exported. In India the Central

Government has entirely renounced its revenue from octroi in favour of the municipalities, but a vestige of the early type is still found in Italy, where the octroi income is divided between the municipalities and the State. "Terminal taxes," however, have not yet disappeared from India, and show no signs of doing so, in spite of the prohibitions and disapproval of the Central Government. Indeed, there seems to be a constant tendency for the orthodox octroi to relapse into a terminal tax; and this tendency would seem to follow inevitably from the inherent vices of the system. The advantages of octroi as a source of revenue may be outlined as follows: It is a productive tax which grows with the prosperity of the town. It falls on a class which could not otherwise be taxed, and it escapes the unpopularity which attaches to direct taxation in India. It is collected from a small and intelligent class, or else from small traders who, as one witness described it, have become used to suffering by force of habit. On the other hand, the disadvantages of octroi are many. The establishment or amendment of an octroi schedule is an operation which requires a greater knowledge of economic conditions than is usually possessed by municipal boards, and there is always a danger that changes may be made for the benefit of certain interests rather than for the benefit of the town at large. The cost of collection is very heavy, the average cost throughout the provinces being about 14·2 per cent. of the net income from octroi. This involves the employment of a poorly-paid staff of officials who make up for the smallness of their pay by the multiplicity of their exactions. Much trouble is caused to railway passengers by the examination of luggage. "The difficulty is specially felt when there are women in the party. In such cases it is alleged in some places that unless the demands of the staff are satisfied, the whole of the baggage is ransacked, and the underclothing of the females of the party exposed to ribald jest." But the two most glaring evils of the octroi system are the *ad valorem* assessment and the refund procedure. The assessment of a tax *ad valorem* necessarily involves delay; the goods are often damaged during examination, and the inspection of invoices leads to the revelation of trade secrets. Such an assessment also encourages the subordinate officials to display a becoming zeal by charging duty on every article which can conceivably be brought within the range of the octroi schedule. "In Allahabad a bottle of hair-wash was imported by passenger train, and after vain attempts had been made to include it for octroi purposes amongst chemicals (which it was stated not to contain) it was classed as

'eggs,' as part of its composition was the white of eggs." It is possible that the evils of the *ad valorem* assessment might be avoided, but there would seem to be no escape from the defects inherent in the refund procedure. The committee made extended inquiries upon this point, and are able to state that as a rule the expense and worry of obtaining a refund are practically equivalent to the amount of the refund itself. In practice, therefore, an octroi system would seem to be equivalent to a terminal tax, and that at a very high rate. It is obvious that if no refunds were made, the scale of duties could be lowered without any loss of revenue. Therefore, since refunds confer no real benefit upon through trade, it would be an unmixed benefit to replace octroi by a "terminal tax." Here the committee join issue with the opinions of the Government of India as laid down in a resolution of 1899, which runs as follows: "Even in the Presidency towns it has been observed that proposals to impose a terminal tax for local purposes with no exemptions or refunds have been seriously advocated. The line of argument in such cases appears to be that as the Government of India approve and sanction the levy of octroi, and as a tax of this sort with the best arrangements is a greater inconvenience to through traffic than a small import with no refunds at all, therefore the Government may be taken as agreeing to a general duty with no refunds, provided it is light enough. The Government of India repudiate this erroneous argument, and desire to make it clear that in their opinion, unless facilities for refunds and exemptions can be arranged, octroi of any kind is not an admissible form of taxation."

The Government of India in effect says: "If you think octroi too oppressive, you must abolish it altogether." To which the committee replies: "We cannot do without the taxation of commodities. Octroi is more oppressive than a terminal tax. Therefore let us have a terminal tax."

Several other sources of revenue are in fact suggested by the committee, and of these the tax on houses, on railways, and on undeveloped building land are worthy of notice. The objections which apply to the general use of a house tax in India are of some interest. Firstly, there is great difficulty in making assessments, owing to the fact that nearly every man lives in his own house, and in some districts it is very difficult to find a rented house at all. Secondly, the nature of a house is not in India, as it is in England, a fair indication of the means of the inhabitant. To quote the report: "The poor man may become rich, but he will continue to live in his ancestral hovel. The descendant of

the rich man may become miserably poor, and find it difficult to supply himself with the necessaries of life. He will not in any circumstances desert the home of his ancestors. He may live by selling the beams or the stonework of portions of the palatial residence which he occupies so inadequately, but he will not consider it consistent with his honour to leave the house or to sell it to others."

Up to the present the rating of railways in India has been confined almost entirely to charges for benefits conferred, such as conservancy, water supply, &c., but within the last few years a movement has arisen in favour of throwing upon the railways a more considerable charge towards the general expenses of municipalities. This movement, however, has been unsystematic to the verge of chaos, and each municipality has proceeded upon its own particular and generally unsuccessful methods. With a view to bringing into line the ill-regulated efforts of the various local authorities to solve this problem, the committee have set upon themselves the task of delineating upon the *tabula rasa* of Indian local finance a novel method of railway assessment. After examining the parochial assessment of English railways and the cumulo assessments of Scotland and Ireland, the committee came to the conclusion that neither of these methods was applicable to local needs. Their final judgment is in favour of a rate leviable on "local gross earnings," i.e., "freight earnings attributable to traffic received at and despatched from the stations in the municipal area."

Such a rate would seem to measure in a very reasonable way the indirect benefits received by the railways from municipal enterprise; e.g., the local gross earnings represent roughly the amount of traffic passing over municipal roads to the railway station. To an English reader, of course, the scheme loses greatly in interest owing to the fact that it has no place for purely rural authorities.

Lastly, the committee deal with the subject of unearned increment, but in a very sketchy manner. Their only positive recommendation is for the taxation of agricultural land lying within municipal limits. In supporting this suggestion the committee take up a position far in advance of that usually held by land-taxers in England. They do not suggest that such land is being deliberately held out of the market by speculators; they merely maintain that the annual value of such land is very high owing to its accessibility to the markets of the town and the facilities for its cultivation, and that such value might equitably be taxed,

the burden of the tax being divided between owner and occupier. Nothing is said with regard to existing contracts.

The committee also took evidence with regard to the taxation of increments of site-values, but did not come to any conclusion on this subject largely owing to lack of information. They say : "As far as we can ascertain, the only impost of the sort which is in actual operation is the American system of taxation of improved values." It is unfortunate that no organisation exists whereby the committee could have informed themselves, *e.g.*, of the Frankfort system.

D. A. BARKER

OBITUARY

DR. N. G. PIERSON

DECEMBER 24TH, 1909, the Netherlands had to deplore the loss of their most eminent economist, Mr. Nicolaas Gerard Pierson. To English readers Pierson was well known by the English version of his great treatise, and as the correspondent for Holland of the Royal Economic Society. A brief sketch of his splendid career will, therefore, not be out of place in this JOURNAL.

Mr. Pierson was born February 7th, 1839. He did not take his degree at one of the Universities; the title of a Doctor of Law was conferred on him, *honoris causa*, in 1875, by the University of Leyden. After some years of practice in banking he was appointed in 1868, before his thirtieth year, as one of the directors of the Bank of the Netherlands. Since 1877 he combined with his directorship the chair of economics and statistics at the newly-created University of Amsterdam, which he occupied till he was called, in 1885, to the presidency of the Bank. In 1891 he became a member of the Cabinet as Minister of Finance, and succeeded in carrying two important reforms in fiscal policy, the introduction of a property tax and of a tax on business and other incomes. In 1894 he retired from office, and returned to his scientific studies till 1897, when the formation of a new Ministry was conferred on him. From 1897 to 1901 the Department of Finance was once more under his administration. Among the most important measures carried under his leadership must be mentioned the Dwelling-houses Act, which Mr. Pierson has himself commented on in this JOURNAL,¹ and the

¹ Vol. xi. p. 511.

Act which introduced compulsory insurance in the case of accidents in industrial establishments. In 1901 his Cabinet had to resign after a General Election. From 1905 to 1909 Pierson was a member of the Second Chamber of the States-General; last year the state of his health did not permit him to apply for re-election.

I can mention here only the most marked events in Pierson's ever-busy life. For many years he took an active part in discussions on a variety of subjects in Colonial policy, and on the administration of public and private relief. The range of topics in which he took a lively interest was very extensive. But first and foremost among his many activities will remain his contributions to economic science. For more than forty years he contributed many articles to the Dutch reviews *de Gids* and *de Economist*; in 1875-76 he edited the first edition of his *First Principles of Political Economy* (entirely rewritten for the 5th edition, 1905); followed in 1884-90 by the more extensive treatise *Manual of Political Economy* (2nd edition, 1896-1902).

One of the most characteristic features of all the writings of Mr. Pierson is his extensive knowledge of foreign economic literature. He possessed a marvellous capacity for taking pains. Before writing one of his first articles in *de Economist* of 1866, on the Italian economists of the seventeenth and eighteenth centuries, he had studied the whole of the fifty volumes of the collection by Custodi, and he did not publish Part IV. of his *Manual*, on *Public Finance*, until after having run over all the volumes of Schanz's *Finanzarchiv*.

Another feature of Pierson's writings is a remarkable lucidity of arrangement and exposition. He had the talent of treating difficult subjects of theoretical economy in a manner which made them palatable even to a lay public. In the words of Prof. Edgeworth: "His solid sense and weighty learning move steadily along the main lines of economic reasoning like those vast engines which, rolling over our material high roads, render them smooth, compact, and serviceable."¹ Pierson's success as a University teacher has, at least in part, been due to the great clearness of his thoughts, and to his facility in finding the most happy expression for them.

In the time-honoured controversy on economic method, Pierson has been from the first a strenuous defendant of the necessity of deductive investigations. To his influence, and that of his predecessor in the presidency of the Netherlands Bank,

¹ ECONOMIC JOURNAL, vii. p. 579.

Mr. Mees, it is to be ascribed that the one-sidedness of the so-called historical school of German economists has been early recognised in our country by the great body of Dutch economists, so that they have been spared the necessity of retracing their steps, as their colleagues in a neighbouring country are in the way of doing in these latter days. But from this it is not to be understood that Pierson undervalued historical and statistical research. In no better way can be shown the universality of his genius than by the delight he himself took in original investigations in the field of history, such as, *inter alia*, the essay on the value of the Dutch mediæval coins in *de Economist* of 1906. And he was fully convinced of the absolute necessity of statistics for the development of concrete economic science, just as well as for practical social economics. He struggled hard to put our statistical service on a good basis.

The development of the public organisation of the statistical service has been a very slow process in the Netherlands. In 1878, when the case for the erection of a Central Government Statistical Bureau seemed hopeless, Pierson took the initiative for the opening of a private "Statistical Institute," under the management of the Statistical Society. From 1884 to 1891 the Institute did good service, but no sooner had Pierson entered the Cabinet than steps were taken for the institution of a public "Central Commission for Statistics." The goal was reached in 1899, when Pierson was again in the Cabinet, by the erection of the "Central Bureau for Statistics." After leaving office, Pierson has been for some years President of the Central Commission, and found great satisfaction in witnessing the continuous development of the institutions, which had been called into being under his auspices.

It is impossible in a few pages to do full justice to Pierson's work in economics. Only a few points can be mentioned here.

Pierson was a firmly convinced Free Trader. Although, on this subject as on others, he was far from being a doctrinaire, he could not speak without irritation on the proposals, made some years ago, of levying import duties on food products. He was the first president of the society for defending free international exchange, established in 1897. On the population question he recognised the essential truth of the doctrines laid down in Malthus's famous essay. In one of the best chapters of his *Manual* he refuted the criticisms of Leroy-Beaulieu and others. He gives an attractive sketch of the rise in the general standard of living, which would have been possible in European

countries, if the increase of population had taken place at a less speedy rate. Against the cry, raised by the detractors of Malthus: "We must go back to Godwin," he put the serious warning that, given that increase, all measures for increasing production ought to be placed in the first rank, and those for realising a better distribution of income only in the second.

Still, in questions of social economics, he was no adherent of the *laissez-faire* doctrine. He had an open eye for the drawbacks of an unbridled individualism. "We have not become Communists," he wrote once, "but in our judgments on social matters is to be found an element of communism. We respect property as the best means to an end, general welfare and general culture, but it deserves respect only so long as it contributes to that end."

On February 7th of last year, Pierson's seventieth anniversary, a committee, consisting of representatives of many shades of political opinion, took occasion to express in his presence their warm gratitude for all the good work he had done in his long career in the interests of his country and for the advancement of economic science. A capital was offered for the foundation of a "N. G. Pierson Fund," intended to promote original economic research. Even then the state of his health did not permit the organisation of any public festival. From that time he did not recover, and before the end of the year he was taken from his beloved wife and his many personal friends, after a prolonged and painful illness.

H. B. GREVEN

Leyden.

WALRAS

MARIE ESPRIT LÉON WALRAS, son of Antoine Auguste Walras and of Louise Aline de Saint-Beuve, was born December 16th, 1834, at Evreux (Eure), in Normandy. He entered the college of Caen in 1844, and afterwards the Lycée of Douai, where in 1851 he graduated as Bachelor of Arts. After a further course of mathematical studies he graduated also in science. In 1854 he entered the Paris "School of Mines," but finding that he had no taste for technological studies, he left and devoted himself to literary and economic work. His first work, published in 1859, was a refutation of the doctrines of Proudhon. In 1860 he took part in a Fiscal Congress at Lausanne. The Swiss Council of Public Education instructed the Department of Public Education

to appoint Walras lecturer on political economy at the Academy of Lausanne, a proposal which only took effect after ten years. In 1850 he had begun to contribute to the *Journal des Économistes* (Paris), and in 1860 he was writing for *La Presse*. After he had, in 1870, entered on his duties at Lausanne, he published his *Éléments d'économie pure*, 1874 and 1877. The second edition appeared in 1889. His *Théorie mathématique de la richesse sociale* was published in 1883. He ceased teaching in 1892, and was made honorary professor of the University of Lausanne. These points of information are given in his autobiography, published in the *Giornale degli Economisti*, December 1908.

In 1896 Walras published *Études d'Économie sociale* (*Théorie de la répartition de la richesse sociale*). He died on January 4th, 1910.

The work of Walras is complex, and becomes intelligible only when we analyse its elements. He himself attached chief importance to it as the expression of a reformer. But this is not its leading feature from a scientific point of view. Nevertheless, it was as a movement of reform that what is known as classic political economy took its rise. It was an attempt to break entirely with the past, and to organise society on a fresh basis. It was believed that practical solutions could be obtained through economic science alone. And that science became synthetic instead of analytic.

In the former half of the nineteenth century, this new orthodoxy suffered from a succession of schisms. Some of these were notable as attempts, not always realised as such, to re-establish the balance of ideas disturbed by the one-sided view of "classic" economics, and to reduce the science of economics to the rank of a branch of social science.

Walras was one of these schismatics, and as such, it may be said of him that he was influenced by his environment. Fortunately, however, for science, he felt the need of laying a solid foundation for his schemes of reformation, and was thus led to re-examine the bases of economics.

The second part of his work may therefore be defined as the attempt to supply a firmer basis to the theories of political economy, and to apply the methods of mathematics to that study.

In his *Éléments d'économie pure* we read: "*Pure political economy* is essentially the theory of the determination of values under a hypothetical system of absolutely free competition" (p. xii.). This, if applied to a science of actual phenomena would be unintelligible. Such a science might institute an inquiry into

free competition, but it would also have to examine monopolies, socialistic organisations, &c. Could we conceivably say:—"Statics is essentially the theory of the determination of the balance of free material points?" Clearly no. This is but a part of statics.

But it is easy to explain Walras's position if we consider the goal at which he aimed. His plan of reform was concerned with a field of economics dominated by free competition; hence he was naturally bent on constructing the theory of that field. Nevertheless, whether he realised it or not, such an inquiry is of service in yet another quest. In analysing what actually is, in separating by abstraction the different parts of the concrete economic phenomenon, we do find a part that may be termed free competition. Walras has the great merit of having given us the theory of this part considered as a general case.¹

The use of mathematics enabled him to study cases of mutually dependent phenomena. These are far nearer to reality than when they are considered only under the aspect of causes and effects—the only aspect accessible to ordinary logic.

When mathematics are applied to particular problems of economic science, they lead merely to results more curious than useful. We should not err widely from truth in saying that, restricted within these limits, the use of mathematics in economic science is futile. On the other hand, for the conception of economic phenomena in a state of mutual dependence, it is simply indispensable. So far nothing else will serve, and he who gives up trying to form that conception may as well give up the use of mathematics. He is in the position of a man who is satisfied with knowing the topography of a small portion of the earth's surface, and cares not at all to know the general shape of the terrestrial spheroid. It must be admitted that there are practical problems for which the former sort of knowledge is more important than the latter. The analogy holds good in the case of economic problems, and indeed for nearly all practical sciences as compared with theoretic science.

Walras did for political economy that which Lagrange effected for rational mechanics, and his fame is bound to grow with every advance of science. But just as the merit due to Lagrange in no way effaces that of his predecessors and collaborators, so does the

¹ Walras studies the problem of economic equilibrium in considering constant values. Professors Edgeworth and Irving Fisher have discussed the problem in terms of variable values, whereby in a way the problem is made more general. I cannot here go into these points of view, belonging, as they properly do, to the history of new economic doctrines.

merit which belongs to Walras detract no iota from that due to scholars like Jevons, who contributed with him to the construction of new theory. There is going on, simultaneously in England, Germany, Austria, America, and Italy, a forward movement towards a *rational economics*, similar to that of *rational mechanics*. Walras was the first to give the theory of a general case. Herein he opened up the path to other similar theories and to investigations which in the future will attain an ever-increasing completeness and generality.

VILFREDO PARETO

Lausanne.

CITY NOTES.

We have received the following "City Notes" from "R. G." :—

The Money Market.—An easy money market has characterised the beginning of 1910. When we wrote three months ago the Bank Rate was being reduced from 5 to $4\frac{1}{2}$ per cent., and the decline has since continued, the steps of the reduction being to 4 per cent. at the beginning of January, $3\frac{1}{2}$ per cent. in the middle of January, and 3 per cent. early in February. In this way, slowly, but without check, the money market has returned to the condition of ease which prevailed before the spasm of last autumn. In spite of the general improvement of trade which has sprung up and the disposition to speculate which has been growing everywhere, the consequence of chronically dearer money, which will no doubt come about before long, has not yet resulted. Perhaps the interruption of business activity by the elections has helped the slackness; but the fact, whatever the cause, is all in favour of a stronger business and speculative movement in all directions later on, the trade revival having only been momentarily checked.

The Elections and Business.—A General Election always spells interruption to business, as it withdraws many of the leaders in finance and trade from their usual activities. Most of the business, of course, goes on without the leaders, current and ordinary affairs being managed by subordinates; but active leadership is indispensable to the full working of the industrial machine, and this is wanting to some extent during an electoral contest. The expenditure on the contest itself involves, too, a withdrawal from the markets of part of the funds that usually support them, and

although this may appear comparatively unimportant, as the whole cost of a General Election is about £2,000,000 only, which is a mere fraction of the immense sum of cash and credit that can in a moment be put at the service of City operations, yet the amount is sufficient to make a difference, for a time at least. The interruption caused by the recent elections has probably been less sensible than it often is, owing to the readiness of operators for a boom, and the long anticipation of the approach of the election itself. Now that it is over, everything—or almost everything—has started forward at once.

The Fall in Consols.—An exception to the cheerful aspect of the markets continues to be made by home securities, especially Consols, where the cause of the weakness is, almost certainly, in part political. The credit of the English Government, owing to the political activity of Socialists and the power they have gained in the councils of one, if not both, of our great political parties, is no longer what it was. The reports of the transfer of investment money from English to foreign securities are probably exaggerated, but they came from too many quarters to be disregarded. Capital may not be "on strike," to use a memorable phrase of Lord Goschen's in 1867, but it has become more disposed than formerly to weigh *pros* and *cons* as between home and foreign investments, and the favour to the home security is no longer what it was. Nothing else apparently can account sufficiently for the drop in Consols in the last four years, notwithstanding the large repurchases for the Sinking Fund of which Mr. Asquith has so often boasted.

					Price.
Consols—February 27th, 1907					87
Do.	"	26th, 1908	...	...	87 ⁵ / ₁₆
Do.	"	24th, 1909	...	...	84
Do.	"	23rd, 1910	...	...	81 ¹ / ₂

There could be no stronger argument for looking carefully into our national finance, which must be damaged by the holding up of the Budget—the postponement of necessary business regarding expenditure and taxation to political wrangling.

The Rubber and Oil Booms.—Stock Exchange activity has been manifested in the special direction of a boom in rubber shares, to which we referred in our last Notes, and which has gone ahead since then in a remarkable manner, with the addition in the last week or two of a smaller boom in oil shares. This rubber boom has already attained such large dimensions as to

become a subject of general interest. Everybody is talking of it: and no wonder. We have to do with something that reminds one of the great speculative manias of former times. The price of rubber itself, the foundation of the speculation, has risen from about 3s. per lb., the price a few years ago, to something between 8s. and 9s. per lb., with no sign as yet of a set-back. The reasons for the advance are on the one hand the huge and increasing industrial demand for rubber for many different purposes, among which rubber tyres for motoring is prominent, but by no means the only demand: and on the other hand the difficulty of increasing the supply quickly, as it takes a few years to bring a rubber plantation into productiveness after being started. There are accordingly all the materials for a speculative mania in the situation, and we have such a fact as this, as set out in the *Statist* of February 26th, that in the two months of 1910 there have been no fewer than fifty-two new issues of rubber shares of a total nominal amount of £6,493,000. Many of these shares cannot be really productive for years to come; but meanwhile, along with older shares, they are the subject of speculative dealings and premiums, and the Stock Exchange is very busy indeed. Just at this time the oil boom comes along to aid the primary boom. The occasion here has been the publication of statements as to large purchases by the Admiralty of reserves of oil for the warships, which has specially benefited the Scotch companies. But this is little more than an occasion, the significance of the movement lying rather in the readiness with which it has been produced and the disposition already manifested by the public to participate in the gambles. The present year, to all appearance, will be full of interest in the City.

The Duty on Silver in India.—The Indian Government, it appears, has imposed a duty on the import of silver into India of four annas per ounce, and immediately there has been a severe fall in the price of silver in the London market. One object apparently is to find revenue. There is a deficit in the Budget owing to the diminution of the receipts from opium consequent on the anti-opium agreements with China. Still, it is much to be regretted that the Indian Government continues in its perverse course of tinkering with the money of the country—silver. No doubt there will be all sorts of excuses for the proposed duty—that silver is no longer the standard money and that the duty will affect the coinage precisely as a seignorage would, while the duty, being on the import, will lessen the discrepancy between the

value of uncoined and coined silver in India. But substantially the general effect of these measures is to keep the money of the people of India in an artificial condition instead of the Government having one of the precious metals for its standard free from tinkering and all artificial manipulation. That trouble will come some day, if it has not already arrived, is very much to be feared. Distrust of their money would be the very thing to create or add to the unrest of the people of India.

R. G.

CURRENT TOPICS

SIR CHRISTOPHER FURNESS addressed a meeting of the employee-shareholders of the Irvine Shipbuilding and Dry Docks Company at West Hartlepool on December 8th of last year on the co-partnership scheme which is at present on trial at the works. He stated that as the result of the creation of the Works Council there had been no friction justifying serious mention. Workmen and directors had obtained a greater appreciation of each other's points of view, and showed a more determined desire to meet each other's wishes. He gave figures to prove that the co-partnership yards had passed through a year of great prosperity. He pointed out that the men had received the guaranteed 4 per cent. upon their deposit, and in addition 5 per cent. by way of bonus upon the sums they had left behind at the office weekly. The scheme was described at its inception in the Current Topics of the *ECONOMIC JOURNAL* of December, 1908.

A CONGRESS of Administrative Sciences will be held in Brussels from the 27th to the 31st of July, 1910 in the grounds of the Exhibition. The Congress will be divided into four sections: (1) Municipal government; (2) intermediate organisations between the State and the local authorities; (3) organisation of central authorities; (4) administrative literature. A British Committee has been formed, of which the Secretary is Mr. C. Montagu Harris, County Councils Association, Caxton House, Westminster. Among the writers of papers already arranged from the British Committee are Mr. Sidney Webb, Professor Sadler, Mr. Edward Jenks, and Sir Thomas Elliott. The entrance fee of £1 entitles a member to receive all the publications of the Congress, even though he is not present.

DURING the discussion of the Housing and Town-Planning Bill, Mr. Burns stated his intention of forming a new branch of the Local Government Board. In this there were to be concentrated the various functions already vested in the Board in regard to the housing of the working classes, together with the important duties devolving on the Department under the new Act. The Treasury has assented to the appointment of the necessary staff, and the new department will soon be in working order. Three housing inspectors have already been added. They will be concerned not only with inquiries as to the sufficiency of housing accommodation throughout the country, but their services will also be used in connection with the appeals to the Local Government Board against closing and demolition orders.

RECENT PERIODICALS AND NEW BOOKS.

Journal of the Royal Statistical Society.

JANUARY, 1910. *Representation of Examination Results in Three Dimensions.* DR. W. GARNETT. *Difficulties in International Statistical Comparisons.* A. D. WEBB. *Distribution of Deaths with Age.* G. UDNY YULE.

DECEMBER, 1909. *The Recent Growth of Population in Western Europe.* SIR J. A. BAINES. (Presidential address.) Follow papers on *The Use of the Median* and *On the Method of Correlation*, read by Mr. Bowley and Mr. Yule at the recent Congress of the International Institute of Statistics.

The Economic Review.

JANUARY, 1910. *The Landlord.* REV. F. W. BUSSELL. The evolution of the landlord is traced from primitive patriarchates to the English manor. *The Conditions of Distress.* E. V. BIRCHALL. The age, trade, wages in last employment, and other attributes of "4,000 Birmingham cases" are recorded. *India and the Opium Traffic.* D. A. BARKER. *Karl Marx's Theory of Value.* H. W. B. JOSEPH.

The Contemporary Review.

JANUARY, 1910. *The Budget and British Capital.* LORD WELBY. Lord Revelstoke's speech in the Budget Debate is traversed. *Canada and Tariff Reform.* J. J. HARPELL. In favour of Free Trade.

The Fortnightly Review.

DECEMBER, 1909. *Small Ownership, Land Banks, and Co-operation.* SIR GILBERT PARKER, M.P.

The Nineteenth Century.

JANUARY, 1910. *A General Strike.* B. C. MOLLOY. *A Self-supporting Penal Labour Colony.* EDITH SELLERS.

The National Review.

JANUARY, 1910. *The Relations of Canada and Germany.* J. C. HOPKINS.

FEBRUARY, 1910. *A Project of Empire.* F. S. OLIVER. Referring to Prof. Nicholson's new book.

The Quarterly Journal of Economics (Boston).

The Tariff Debate of 1909 and the New Tariff Act. F. W. TAUSSIG. The principal novelty in the advocacy was the so-called "true

principle" that the cost of production at home and abroad should be equalised by protective duties. The Act "still leaves an extremely high scheme of rates, and still shows an extremely intolerant attitude in foreign trade." *American Shoemakers, 1648-1895.* J. R. COMMONS. A sketch of industrial evolution. *Insurance of Bank Deposits in the West.* L. OKLAHOMA. *Technical Development in Cotton Manufacture since 1860.* M. T. COPELAND. *The Measurement of Concentration of Wealth.* G. P. WATKINS, W. M. PERSONS. A debate turning on the mathematical representation of statistics.

Political Science Quarterly (New York).

- DECEMBER, 1909. *State Taxation and Foreign Lands.* C. F. ROBINSON. *Readjustment of Railway Rates.* C. C. MCCAM. *Marxism versus Socialism, IV.* V. G. SIMKHOVITCH. *Our South American Trade.* W. R. SHEPHERD.

Journal of Political Economy (Chicago).

- JANUARY, 1910. *The Tariff of 1909.* H. PARKER WILLIS. *Tobacco Pools of Kentucky and Tennessee.* ANNA YOUNGMAN.
- DECEMBER, 1909. *La concurrence limitée et les effets.* G. DE MOLINARI. *La crise Anglaise.* YVES GUYOT. *Prévisions pour 1910.* J. DAVIES and C. P. HAILEY. A summary of the forecasts as to economic conditions which are made in the authors' annual *Business Prospects.*

Journal des Économistes (Paris).

- JANUARY, 1910. 1909, Yves Guyot, *Le Marché Financier.* A. RAFFALOVICH. *Les Comptes des exploitations industrielles de l'état.* G. SCHELLE.
- FEBRUARY. *Du rôle politique des Économistes.* Y. GUYOT. *Le monopole des Assurances par l'état.* G. DE NOUVION. *L'évolution du régime financier en Australie.* BIARD D'AUNET. *La condition des ouvriers de l'industrie en Espagne.* A. MARVAUD.

Revue d'Économie Politique (Paris).

- JANUARY, 1910. *L'Actionnariat Ouvrier.* CHARLES GIDE. Some forms of profit sharing may be destined to prove a refuge—like the sanctuaries and free cities of old—from war, the war between labour and capital. *Les valeurs mobilières et les projets de réforme fiscale.* H. TRUCHY. *Le libre échange et le protectionisme au Congrès de Londres, 1908.* R. DALLA VOLTA. *La situation de la propriété rurale en France.* M. AUGÉ LARIBÉ.
- FEBRUARY, 1910. *La réforme des contributions directes.* A. GIRAULT. *Le machinisme et le chômage.* G. OLPHE-GALLIARD. *Surproduction.* J. LESCURE.

Revue d'Économie Politique Internationale (Brussels).

- DECEMBER, 1909. Agricultural co-operation and credit in Spain, the economic conditions of Persia, "financial life" in Europe and (by Charles Conant) America, are among the various subjects handled.

L'Égypte Contemporaine (Cairo).

JANUARY, 1910. The first number of this review, the organ of the newly-formed Khedival Society of Political Economy, Statistics, and Legislation, contains articles on *Mutual Insurance against Seizures of Meat at the Alexandria Slaughter-houses*. J. B. PIOT (Bey). *Hygiene in Egypt*. PROF. J. HOBBS. *Foreign Exchange Operations in Egypt*. E. PAPASIAN.

Jahrbücher für Nationalökonomie (Jena).

OCTOBER, 1909. *Das Zunftwesen Konstantinopels im 10 Jahrhundert*. H. GEHRIG. *Die Handelspolitik Nürnbergs im Spätmittelalter*. J. MÜLLER. *Die Kaffeevalorisation*. F. SCHMIDT. The experiment made by the State of São Paulo is of doubtful success.

DECEMBER. *Die Reichsfinanzgesetze v. 1909*. A. HESSE.

JANUARY, 1910. *Die französische Sparkassenwesen*. SCHACHNER.

Archiv für Sozialwissenschaft und Sozialpolitik (Tübingen).

NOVEMBER, 1909. *Der kapitalistische Unternehmer*. W. SOMBART. The character and function of the entrepreneur are analysed.

JANUARY, 1910. *Karl Marx and Michael Bakunin*. E. BERNSTEIN. *Haushaltungs-Budgets*. S. PROKOPOWITSCH. An extensive series of family budgets relating to workmen in St. Petersburg.

Zeitschrift für die Gesamte Staatswissenschaft (Tübingen).

1910. No. I. *Wirtschaftswissenschaft und Wirtschaftspolitik*. G. COHN. *Menschenschmuggel*. The smuggling of yellow men into the United States of America is the subject of a paper by E. SCHULTZE. There are several other noteworthy papers.

Giornale degli Economisti (Rome).

OCTOBER, 1909. *La Semiologia economica a base statistica*. R. BENINI. The observation of economic symptoms is prescribed. *Ancora di municipalizzazione*. G. MONTEMARTINI. *L'elemento Giuridico nella Scienza delle finanze*. V. TANGORRA. *La teoria dell'equilibrio economico secondo il Prof. V. Pareto*. L. AMOROSO.

NOVEMBER-DECEMBER, 1909. *Ancora la legge di piccoli numeri*. L. BORTKIEWICZ. The writer continues to defend his law of small numbers against the attacks of Signor Gini. *Sulla teoria dell'immiserimento*. R. MICHELS. The alleged tendency towards increasing misery is considered. *I principii distributivi delle imposte moderne*. B. GRIZIOTTI. An exhaustive examination of the first principles of taxation. *I principii della teoria della moneta*. VECCHIO. The rate of discount is a fundamental element in the determination of the value of money.

The Rivista di Scienza (Bologna).

The *Rivista di Scienza* (Bologna), also known as "Scientia," which purports to "co-ordinate the work carried on in different fields of knowledge," has recently published the following articles relating to economics: Vol. VI. (1909) *Diminishing Returns and Value*. T. N. CARVER. Vol. VII. (1910) *On the Use of the Differential Calculus in Economics*. F. Y. EDGEWORTH.

NEW BOOKS.

ANGELL (NORMAN). *Europe's Optical Illusion*. London: Simpkin, . . and Co. Pp. 126.

[The alarms about a German invasion are deprecated.]

BOWLEY (A. L.). *An Elementary Manual of Statistics*. London: Macdonald and Evans. 1910. Pp. 215.

[This manual is intended for the use of those who desire some knowledge of statistical methods and statistical results without going deeply into technicalities or undertaking mathematical analysis. It is also designed as a first course for students who wish to proceed further.]

BURN (JOSEPH). *Stock Exchange Investments in Theory and Practice*. London: Layton. 1909. Pp. 322.

[A course of lectures delivered at the Institute of Actuaries, 1908-9.]

CADBURY (W. A.). *Labour in Portuguese West Africa*. Second Edition, with an added chapter. London: Routledge. 1910. Pp. 187.

CARNFORD (L. COPE). *London Pride and London Shame*. London: P. S. King. 1910. Pp. 174.

CHANCE (SIR WILLIAM). *Poor Law Reform. Via Tertia. The Case for Guardians*. London: King. 1910. Pp. 95.

DODD (J. THEODORE). *The Poor and their Rights: How to Obtain Them under Existing Legislation*. London: P. S. King. 1910. Pp. 28.

ELDERTON (W. PALIN and ETHEL M.). *Primer of Statistics*. viii+86 pp. London: A. and C. Black. 1909. 1s. 6d. net.

[A very simple and elementary statement and explanation of those statistical terms and methods which are used in connection with frequency curves and with correlation; primarily for the use of students in biometry, but of general use for all beginners in mathematical statistics.]

JONES (HENRY). *The Working Task of the Social Reformers, and other Essays*. London: Macmillan. 1910. Pp. 305.

Liverpool Joint Research Committee. *How the Casual Labourer Lives*. Report on the domestic condition and expenditure of the families of certain Liverpool labourers. (Read before and published by the Liverpool Economic and Statistical Society.) Liverpool: Northern Publishing Co. 1909. Pp. 114.

NICHOLSON (PROF. J. SHIELD). *A Project of Empire*. London: Macmillan. 1909. Pp. 284.

[Reviewed above.]

PONSONBY (ARTHUR). *The Camel and the Needle's Eye*. London: Fifeild. 1910. Pp. 186. 3s. 6d. Pp. 252.

PRATT (E. A.). *The "Tied House" System*. London: King. 1910. Pp. 16. 2d.

ROSE (FRANK H.). *The Coming Force: The Labour Movement*. London: Independent Labour Party. 1909. Pp. 117.

TRESON (FRANK). *The People's Progress*. London: Murray. 1910. Pp. 159.

[“A study of the facts of national wealth, with some answers to Socialists” is the secondary title.]

TRYON (CAPT. C.). *Tariff Reform*. London: National Review Office. 1909. Pp. 139.

WELSFORD (J. W.). *The Strength of England. A Politico-Economic History of England from Saxon Times to the Reign of Charles the First. With a preface by W. Cunningham, D.D.* London: Longmans, . . 1910. Pp. 362.

WICKSTEED (PHILIP H.). *The Common Sense of Political Economy*. London: Macmillan. 1910. Pp. 702.

[“This book is intended primarily as a popular but systematic exposition of the ‘marginal’ theory of Economics.”]

WILLIAMS (SYDNEY CHARLES). *The Economics of Railway Transport*. London: Macmillan and Co. 1909. Pp. 308.

BARRETT (J.). *Latin America: The Land of Opportunity*. Washington, D.C.: International Bureau of American Republics. 1909. Pp. 104. Gratis.

BONAR (J.). *Philosophy and Political Economy in some of their Historical Relations*. New York: Macmillan. 1909. Pp. xviii + 414. 11s. 6d. (New edition.)

CALLENDER (G. S.). *Selections from the Economic History of the U.S.* Boston: Ginn. 1909. Pp. 750. 10s. 6d.

ELY (PROF. R. T.). *Outlines of Economics*. Revised and enlarged by the author and Professors Thomas S. Adams, Max. O. Lorenz, Allyn A. Young. New York: Macmillan Co. 1909. Pp. 700.

[The book purports to differ from the *Elementary Principles of Economics* published in 1904 by Ely and Wicher in that it is a more advanced treatise adapted for use in Colleges.]

HUGHES (J. W.). *Value Price and Profit under Universal Monopolies*. Int. Soc. Review, August, 1909.

LIGHTENBERGER (JAMES P.). *Divorce*. (Columbia University Studies.) New York: Columbia University. 1909. Pp. 230.

[From a greater freedom of divorce the writer expects ultimately beneficial results, though the immediate result may be to increase the divorce rate.]

MILLS (H. E.). *Outlines of Economics*. New York: Poughkeepsie. 1909. Pp. 133.

[Intended as a guide for students using specified text-books.]

NATHAN (N.). *Economic Heresies*. Boston: Houghton. 1909. Nation, 4, N. 1909.

PRICE (W. H.). *Life Insurance Reform in New York*. (Amer. Econ. Association.) Cambridge, Mass. 1905. Pp. 95.

SELIGMAN (E. R. A.). *Principles of Economics*. Fourth edition, revised and enlarged. New York: Longmans. 1909. Pp. lii + 710. 11s. 6d.

[Bibliographical notes, tables and charts have been brought up to date.]

SELIGMAN (PROF. E. R. A.). *The Shifting and Incidence of Taxation*. Third edition, revised and enlarged. New York: Columbia University Press, 1910. Pp. 427.

[The new edition contains references to the most recent discussions, besides many other additions.]

UNWIN (G.). *The Guilds and Companies of London*. New York: Scribners. 1909. Pp. xvi + 397. 8s. 4d. net.

[An historical study of the London Guilds from the days of Henry Plantagenet to those of Victoria.]

URBAN (WM.). *Valuation: Its Nature and Laws*. New York: Macmillan. 1909.

ANDRÉADÈS (PROF. A.). *Les finances Serbes*.

BLANCHARD. *Cours d'Économie Politique*. Tome I. *La production, la consommation, et la plus grande partie de la répartition*. Paris: Pedone. Pp. 712.

[The course purports to be for the use of students of the "Faculties and Schools of Law."]

CORNÉLISSSEN (C.). *Théorie du salaire et du travail salarié*. Paris: Giard. 1908.

DEWAVRIN (M.). *Canada économique au XX. siècle*. Paris: Rivière. 1909. 3.50 fr.

JULIN (ARMAND). *Précis de Cours de Statistique*. Avec une préface par M. A. de Foville. Brussels: Misch. 1910. Pp. 242.

[An abbreviated outline of the elementary methods and technique of statistics, followed by a more detailed comparative account of the nature of the data collected in several countries as to population, production, agriculture, trade, transport and prices. A book of statistical rubrics and definitions, but without actual statistics.]

MAUNIER (RENÉ). *L'origine et la fonction économique des villes*. (Bibliothèque Sociologique Internationale.) Paris: Giard. Pp. 325.

MONY (M. S.). *Étude sur le travail*. Third edition, revised. 2 vols. Paris: Hachette. 1909. 15 fr.

[A treatise on modern social organisation.]

PIRARD (LÉON). *De l'ordre Social*. Paris: Lebègue. Pp. 333.

POINSARD (L.). *La production, le travail, et le problème social dans tous les pays au XXme. siècle*. Paris: Alcan. 1907.

SÉAILLES. *La Répartition des fortunes en France*. Paris: Félix Alcan. Pp. 144.

SEIGNOBOS (C.). *La méthode historique appliquée aux sciences sociales*. Paris: Alcan. 1909. 5.50 fr.

SÉNÉCHAL (LÉON). *La Concentration Industrielle et Commerciale en Angleterre*. Paris: Publications Scientifiques. 1909. Pp. 240.

SUBERCASEAUX (G.). *Essai sur la nature du papier monnaie*. Paris: Larose. 1909. Pp. 44.

[As Professor of Political Economy in the University of Chili the writer has had an opportunity of observing the phenomenon which he writes about.]

SURET (DR. LOUIS). *Théorie de l'impôt progressif*. Paris: Alcan. 1910. Pp. 774.

VIGNES (PROF. J. B. M.). *Histoire des doctrines sur l'impôt en France. Les origines et les destinées de la dixme. royale de Vauban*. Paris: Giard. 1909. Pp. 517.

JÄCKEL (HERBERT). *Die Landgesellschaften in den deutschen Schutzgebieten*. Jena: Gustav Fischer. 1909. Pp. xvi + 315.

[A very full study of the economic and legal position of the joint-stock companies (railway, mining, &c.), formed to open up new territories in German colonies, more especially in New Guinea, South-West Africa and the Cameroons.]

KRÖHNE (MARIE). Die Grosshandelsersteigerungen. (Zeitschrift für die Gesamte Staatswissenschaft, Ergänzung XXXII.). Tübingen: Laupp. 1909. Pp. 182.

[A study on auctions.]

LEXIS (PROF. WILHELM). Allgemeine Volkswirtschaftslehre. (Die Kultur der Gegenwart h. v. Paul Hinneberg, Teil II., Bd. X.) Berlin: Teubner. 1910. Pp. 259.

MATAJA (DR. VICTOR). Die Reklame. Eine Untersuchung über Ankündigungswesen und Werbetätigkeit in Geschäftsleben. Leipzig: Duncker and Humblot. 1910.

MAYER (GUSTAV). Johann Baptist von Schweitzer und die Sozialdemocratie. Jena: Gustav Fischer. 1909. Pp. vii + 448.

[Schweitzer was the man who completed the work that Lassalle had commenced. Little is known about him, so that the author of this book breaks new ground. Although Schweitzer was unsuccessful, his life was worth writing, if not for its own sake, at least for the light the story throws on the conditions that prevailed in the political parties in Germany, more especially in the German social democracy, between 1864 and 1875.]

MUHAUS (E.). Die Unverletzlichkeit des Eigentums. Breslau: Kern. 1909. Pp. viii + 108. 2.80 m.

PHILIPPOVICH (E. v.). Grundriss der politischen Oekonomie. Vol. I. Allgemeine Volkswirtschaftslehre. Eighth revised edition. Tübingen: Mohr. 1909. Pp. xii + 435. 10 m.

SCHULZE (F.). Die Aufgabe des Grundeigentums. Berlin: Eberung. 1909. Pp. 236. 6 m.

TRIER (DR. JULIUS). Die volkswirtschaftliche Bedeutung der technischen Entwicklung der deutschen Lederindustrie. Leipzig: Klinkhardt. 1909. Pp. 91.

WAGEMANN (DR. E.). Britischwestindische Wirtschaftspolitik. Leipzig: Duncker and Humblot. 1909.

WALDSCHÜTZ (O.). Editor. Bibliographie der Sozialwissenschaften. Dresden: Böhmert. 1909. Pp. vii + 664. 12 m.

WATERSTRADT (F.). Die Rentabilität der Wirtschaftssysteme nach J. H. v. Thünens "Isoliertem Staat" u. in unserer Zeit. Berlin: Parey. 1909. Pp. ii + 157. 5 m.

WEBER (DR. A.). Die Aufgaben der Volkswirtschaftslehre als Wissenschaft. Tübingen: Mohr. 1909. Pp. 77.

GIDE (C.). *Economia Sociale*. Translated by G. Mortara. Milan: Vallardi. Pp. vi + 323. 1909. 4 l.

GRAZIANI (PROF. A.). *Problemi Speciali di Valore di Scambio* (Istituti giuridici della R. Università di Napoli. No. 3.) Napoli: Jovene. 1910. Pp. 88.

[The special problems deal with value in relation to cost of production, the measure of value, prices and the rate of discount, the incidence of export and import duties; the last referring to papers in the *ECONOMIC JOURNAL* by Messrs. Bickerdike, Chapman, and Pigou.]

GRILLI (DR. CARLO). *Due sistemi di economia politica*. Roma: Unione editrice. 1909. Pp. 158.

LORIA (A.). *Corso completo di economia politica*. Turin: Frat. Bocca. 1909. Pp. viii + 711. 18 l.

LUCA (EMILIO DE). *Della Emigrazione Europea ed in particolare di quella Italiana*. Turin: Bocca. 1909. 4 vols.

SELLA (PROF. EMANUELE). *La Vita della Ricchezza Macher*. "Biblioteca di Scienze Sociali. Vol. LVII. Turin: Bocca. 1910.

VALENTI (G.). *Ancora del valore pratico delle dottrine economiche*. Turin. 1910.

TROFIMOFF (A.) *The Theory of Technical Rents*. Moscow. 1910. Pp. 292.

[This Russian work is directed against Karl Marx.]

THE ECONOMIC JOURNAL

JUNE, 1910

MEETING OF THE ROYAL ECONOMIC SOCIETY.

THE twentieth meeting of the Society took place on the afternoon of April 8th, followed in the evening by a dinner (at the Hotel Cecil), at which the President, the Right Honourable R. B. Haldane, M.P., presided. After dinner Professor J. S. Nicholson gave an address on a subject closely connected with that of the remarkable book which he has recently published (reviewed in the March number of the ECONOMIC JOURNAL). The President prefaced the Professor's address with some appropriate introductory remarks, which we here reproduce.¹

Mr. Haldane said Professor Nicholson had recently written a book called "A Project of Empire," in which he dealt with a side of Adam Smith's great book which of late years had received increasing attention. He laid stress on the problem of defence, and suggested that the problem might be solved by some system of common contributions from the different parts of the Empire, to be collected, it might be, by an import duty, levied on a common scale throughout the Empire, by which funds might be raised for providing for the common purposes of defence. At the last two Colonial Conferences it had proved possible to organise an Imperial general staff, for the purpose not only of working out the common purpose of the defence of the Empire, but for giving such advice to the heads of the various colonies that they might think and act alike in the details of their military organisation. Perhaps the Navy would have an Imperial general staff before long, and then they would have the same process in the adjustment of the Fleet. It was really through the intelligence and the will of the

¹ From the Report of *The Times*, April 9, 1910.

Empire as a whole, and by the elaboration and definition of a common purpose, that we should attain to unification and solve the question of contributions that seemed so perplexing. It was not right, for instance, that the taxation per head should be so enormously greater for naval and military purposes in Great Britain than it was in the colonies. When they looked into it, the reason was that we had to maintain the force which went over-seas to whichever part of the Empire was assailed. The burden should in course of time be more evenly borne, and it might be, as Professor Nicholson pointed out in his book, that there would be *pro rata* contributions for that purpose. But to tackle that question in the abstract as it stood to-day was to expose oneself to every kind of rebuff and to conjure up every kind of difficulty. For himself, he felt that if the purpose was made clear, and became a living and real purpose, the difficulties would disappear. But it was only by avoiding abstract views and rigid plans beforehand that we could save ourselves from defeat and disaster in these efforts. First get the frame of mind of the Empire as a whole, and then we should overcome the troubles that were in front of us. They found that in the two Imperial Conferences. As soon as the Prime Ministers saw the purpose and agreed with it the difficulties which used to be almost insuperable vanished like magic. And so he thought it was in the larger questions which Professor Nicholson discussed in his book. Time, which softened everything, would soften the difficulties which Professor Nicholson dwelt upon, and he did not despair to see a time in which, when the smoke of battle was cleared away, it would be found that it was not necessary to resort to all the tests and standards in all their abstract nakedness which the two great contending parties sought to apply to every question that came up, but that insensibly, silently, and in a fashion which we to-day did not take account of, these problems would have resolved themselves.

THE ECONOMICS OF IMPERIALISM.¹

WHEN the Council of this Society did me the great honour of inviting me to give an address at this annual function on some of the topics arising out of my recently published book,² I confess I was as astonished and as uncomfortable as an author who is requested to write a signed review of his own work. On reflection, however, I felt that the invitation was so wide in its scope that I could avoid the personal element altogether and yet seize the occasion of putting before you some of the ideas suggested by criticisms, friendly and otherwise, of the book. And with this apology for accepting your honourable invitation, I shall proceed with the task imposed upon me in a purely detached and impersonal manner.

In dealing with the economics of Imperialism, the preliminary question arises : Why should we go back to the ideas and methods of Adam Smith? More than sixty years ago J. S. Mill wrote in the preface to his own *Principles* that the *Wealth of Nations* is in many parts obsolete and in all imperfect. Why, then, should we not take the very latest presentation of economic doctrines and apply the marginal theory with the aid of the higher mathematics?—for Mill himself is by this time also considered obsolete and imperfect.

The answer I conceive is two-fold : positive and negative.

In the first place, from the negative side, it is ancient learning that the greatest obstacle to the advancement of any science or the solution of any particular problem is the use of inappropriate conceptions.

Far be it from me to under-rate the value in economics of mathematical methods, whether in the explication of conceptions or in the uses of statistics ; but the application of mathematical ideas and methods is strictly limited, and the limitations have been specially emphasised by the greatest of the mathematical economists,* and notably by Cournot, the father of them all.³ Unless

¹ Address to the Royal Economic Society, 8th April, 1910.

² *A Project of Empire* (Macmillan and Co.).

³ "Many important considerations do not lend themselves easily to mathematical expression : they must either be omitted altogether or clipped and pruned till they

these limitations are recognised, our economists are in danger of falling into the practices of the people of the island of Laputa, where the immortal Gulliver was measured for a suit of clothes by sextants and other mathematical instruments—and very ill-fitting the clothes turned out to be—and where everyone was so much absorbed in mathematical problems that he required an attendant flapper to call his attention to the affairs of real life by a gentle tap on the ear and the mouth. Now, we are told a good many stories of the absence of mind of Adam Smith, but one thing is certain, that, although he wrote a history of astronomy, and was skilled in the mathematics of Newton, he never needed a flapper when writing the *Wealth of Nations*.

And in the same way the ideas in the marginal theory have their uses; but again their uses are strictly limited, and it is rather remarkable that Jevons himself advocated as regards general economics the return to the methods of Adam Smith.

Suppose we try to apply the marginal theory to public expenditure. We should arrive at something like this: We must so adjust the expenditure that the marginal button on the last gaiter of the last soldier must be just equal in utility, to the last crumb given to the last loafer on the margin of unemployment. But we all know that in public expenditure we cannot even think, let alone work, in terms of infinitesimals; we require much bigger units; we must compare, for example, the utility of the last *Dreadnought* with the utility of the abolition of the pauper disqualification for old-age pensions.

So much for the negative aspect of the question of method. And on the positive side the first reason for treating the economics of imperialism with the ideas and the methods of Adam Smith may be stated in the words of our President. In the monograph published by Mr. Haldane¹ in 1887, he wrote: "Adam Smith had a perception that abstract propositions, however carefully stated, express only one aspect or side of things, and are therefore wanting in truth, a quality which belongs to what is concrete alone. Abstractions are useful servants, but bad masters." And perhaps I may be permitted to add that, from this point of view,

resemble the conventional birds and animals of decorative art. And hence arises a tendency towards assigning wrong proportions to economic forces, those elements being most emphasised which lend themselves most easily to analytical methods." Marshall, *Principles of Economics*, Mathematical Appendix, Note XIV. p. 850 (fifth edition). Cf. Professor Edgeworth's paper "On the application of mathematics to political economy," *Journal of the Royal Statistical Society*, Dec. 1889: probably the best statement in brief compass of the uses and limitations of mathematical methods in economics.

¹ *Life of Adam Smith*. By R. B. Haldane.

what has generally been noted as the chief fault of the *Wealth of Nations* is its principal merit; and those who complain of the diffuseness really complain of the persistent conversion of abstractions into truths.

A second reason for reverting to the methods of Adam Smith is that he works with ideas that are intelligible and familiar to the common man. Many years ago I made the observation that no one had ever ventured to use the expression marginal utility in a leading article, and since that time I have verified the statement so far that I have only once seen it used in a leader, and that was in a Scotch paper, and we all know that the Scotch are very fond of abstractions.

Nor must it be supposed that, if we use ideas implicit in common thought and express them in common language, therefore we get rid of all difficulties and that there is no need for scientific analysis. The rules of chess are comparatively simple; they can be effectively learned and practised by children. Chess is even supposed to be a game; and yet everyone knows that there is no limit to the difficulties of chess strategy and combinations. And, as Adam Smith observed: "In the great chess-board of human society every single piece has a principle of action of its own altogether different from that which the legislator might choose to impress upon it." Perhaps the greatest difficulties in economics are in the regions which border on law and government, and in which for the most part mathematical ideas are inappropriate.

And finally it may be said that Adam Smith supplied the ideas with which practical statesmen worked. "Cobden," says Lord Morley,¹ "discovered no new economic truths that I know of." And he expressly assigns to Adam Smith the provision of the economic ideas, not only for Cobden, but for Mr. Gladstone himself. Adam Smith was, indeed, such a universal provider of ideas that we have not yet found practical statesmen big enough to apply all of them; and, most of all, his ideas on imperial federation still await practical realisation. At the time he was writing they were of supreme importance; and my main object is to show that they are also of supreme importance at the present time.

The oldest problem in the art of government is the proper distribution of functions between the local and central, or little and big, authorities; and it is a problem which in every progressive society is continually appearing in new forms. The fundamental question in imperialism is, in its essence, only a form of

¹ *Life of Gladstone*. Bk. V., ch. IV., sec. 2. Vol. I., p. 517 (cheap edition).

this ever-recurring problem. The question is this: Has the time arrived when it is desirable, as regards the constituent parts of the British Empire, to extend the principle of centralisation, and, if so, in what directions? A survey of the course of history shows that at certain periods progress has only been possible—and decay has only been prevented—by the increase in the powers of the central authority. On the other hand, it is true also that the premature and undue extension of the central authority has often ended in despotism and bureaucracy. The dangers of over-centralisation and over-government have been so often exemplified that perhaps we may still venture to lay down the general proposition that no task should be assigned to the central or larger authority which is already done well enough by the local or smaller, just as we used to believe that no task should be assigned to any kind of government which was well enough done by individuals when left to themselves. This was certainly the position of Adam Smith. If, then, we take as our guide the principles of Adam Smith, we are pretty sure to avoid the evils of over-centralisation usually associated with the term imperialism.

Under that perverted phrase, "the simple and obvious system of natural liberty," three great duties were assigned by Adam Smith to the sovereign power of any State—"duties of great importance, but plain and intelligible to common understandings." And the first of these duties is defence against foreign aggression. With reference to the fulfilment of this duty, every progressive nation has witnessed the transfer of functions from the local to the national authorities. And in the same way the principal agent in leading up to the confederation and amalgamation of States formerly independent has been this primary need for defence. Progress in defence has been coincident with progress in amalgamation and in concentration. War has become more and more a business that must be carried on on a large scale. The small nations exist on sufferance, or on usage, or as make-weights in a supposed balance of power, but even the smallest nations recognise the primary duty of defence, and they perform the duty on the largest scale possible.

The first question, then, we have to decide, is this: Is it desirable under present conditions for the constituent parts of the British Empire to aim at a truly imperial or centralised or federal system of defence, or is it preferable to recognise the tendency to disintegration and the development of separate nationalities?

If we look only to the problem of defence, to the character of

the aggregation of States that is called the British Empire, and to the exposure of every constituent to attack, the case for a real union is perhaps stronger than in any other instance, past or present. The conditions of such a real imperial union—*i.e.*, for defence—are three, all closely connected, namely : first, organisation under central control ; secondly, a continuous provision of the requisite funds for defence is more and more a matter of money ; and, thirdly, a continuing government which shall represent in a satisfactory way the various contributories.

I may pass over very lightly the first of these requisites, *viz.*, organisation, because the self-governing Dominions have already admitted the principle of imperial organisation—as, for example, in recognising the advantage of the institution of an imperial general staff, of similar training and discipline, and of the interchangeability of parts in the naval and military machinery. Once the principle has been put in operation, the advantages are so obvious that, so far as the mere efficiency of organisation is concerned, it is certain to be extended. And it cannot be doubted, as Mr. Haldane has so forcibly explained, that this development of the organisation of defence will of itself also tend to promote Imperial union both in sentiment and in reality.

A considerable part, no doubt, of the purely military defensive organisation may be with advantage of a local character, and provided for out of local funds ; but such a purely local provision is a very different thing from true imperial defence. This system requires not only a great development of imperial naval power, but the naval power must be supported by a considerable amount of mobility as regards the military forces. And the conclusion is that these requirements of imperial defence cannot be adequately met merely by local contributions for local needs.

And this brings us to the second requisite of defence : the continuous provision of the necessary funds. The recent Conference¹ showed that the Dominions approved in principle of sharing in the duty of naval defence, and in confirmation they have made voluntary offerings of ships and money, and they have assented to the beginnings of a general policy for the distribution of the burden. But the method of voluntary contributions, though sufficient for present exigencies, and invaluable for its moral effect and as the recognition of a duty and a principle, seems unsatisfactory if we look forward to no very distant future ; and in the matter of defence in particular we must take account of the growth and redistribution of political power both within and without the Empire.

¹ August 1909. See Correspondence and Papers. [Cd. 4948.]

The acceptance of some rule of apportionment of the expense of the imperial part of defence according to some kind of test of ability—*e.g.*, wealth and population—would be an improvement on the simple, haphazard plan of voluntary aids and benevolences. At the same time, it must be admitted that any satisfactory rule which should be self-adjusting to changes in wealth and population would be difficult to construct and possibly difficult to enforce. "In a true federal union," as Professor Bastable observes, "instead of an arrangement between separate political units, there is a system of taxation operating on persons, natural or juristic, and enforced by sovereign authority." This is to say that in the true federation the central or federal government draws on certain kinds of revenues of the persons throughout the federation, or it takes the proceeds or part of the proceeds of certain kinds of taxes. This, I need hardly remind you, was the method approved by Adam Smith, and he made a careful examination of the taxes which might be used for this purpose.

In the realisation of such a scheme there are no doubt very great difficulties. There is the appearance at least of sacrificing the principle of fiscal autonomy, and there is the real difficulty of adjusting the actual taxes.

And as so often happens in things political, the appearance is a much greater difficulty than the reality. Fiscal autonomy may be best described in the language of Lord Bacon as an idol of the market place. "These are the idols which have entwined themselves round the understanding from the associations of words and names. For men imagine that their reason governs words, whilst, in fact, words react on the understanding." These idols are the most troublesome of all. They are of two kinds, and first the names of things that have no existence. Fiscal autonomy seems to be an idol of this kind. The literal translation of the Greek and Latin is, I suppose, voluntary taxation.

Of course, everybody knows that no taxation is voluntary; compulsion is of the essence. Accordingly, taxes are supposed to be voluntary if they are imposed by the representatives of the taxpayers. We are, in fact, brought back to representation as the only real meaning—difficult as it is—the only real meaning to be attached to fiscal autonomy. And in the scheme of Adam Smith taxation and representation go together; and there is no real sacrifice of fiscal autonomy if, as in that plan, the different States are represented. And it must be observed that even if we continue to rely on voluntary contributions—*i.e.*, the most

¹ *Public Finance*, p. 329 (3rd edition).

rudimentary of the methods of securing general defence—some scheme must be devised by which the contributories shall be entitled to a share in the control of the general expenditure and of the policy by which the principle of defence is regulated. We cannot expect a continuous stream of voluntary contributions in the form of money or ships or expeditionary forces unless there is some kind of representation of the contributories.

The real alternative to a federal or imperial union is a disintegration into truly independent nationalities in which each nation keeps up as much or as little of naval and military power as it thinks fit.

It is time now to make a step forward in the general argument based on the lines of Adam Smith. Let us suppose, then, that the principle of defence has been accepted, and with it the ideas of central organisation, common contributions, and common control. What are to be the sources of revenue most to be relied on? The first of these sources which in practice is most relied on by great federal combinations is the revenue from the Customs. And the consideration of this source of revenue naturally leads up to another aspect of imperial federation, namely, the commercial relations of the federated States *inter se* and the relations of the federal States to foreign Powers.

An appeal to history shows that in real federations, next to combination for defence, the most noteworthy feature is the abandonment of the restrictive use of Customs duties between the constituent States; that is to say, that as regards federated States *inter se* the policy of internal free trade has been generally adopted. But it is equally true that in the commercial relations of the federations to foreign States, in general the opposite policy of protection has been the rule. The two lines of policy are not necessarily connected, and are supported by different reasons. The United Kingdom, for example, has maintained a system of internal free trade with external protection in one long period, and with external free trade in another long period as regards foreign countries. In any case, however, in a true federal State or real imperial union, the control of the fiscal relations with foreign States is vested in the central authority. In some important cases also, it may be observed, a fiscal union (with internal free trade and uniform Customs) has preceded the definite union for defence.

The policy of internal free trade—i.e., between the various parts of the British Empire—has, then, in its favour in the first place the historical argument. In the development of the idea

of nationality, the abolition of internal restrictions has played an important part. Adam Smith asserted that the freedom of internal commerce was, perhaps, one of the principal causes of the prosperity of Great Britain, and argued that if the same freedom could be extended to Ireland and the plantations, both the grandeur of the State and the prosperity of every part of the Empire would probably be augmented. And, as usual, he supported the positive by the corresponding negative argument. In his search for truth he became diffuse. France was less prosperous owing to the different revenue laws of the different provinces; the little duchy of Milan was divided into six provinces with different systems of taxation; the still smaller territory of Parma was divided into four fiscal areas. And of these little States he says that nothing but the extreme fertility of the soil, under such an absurd system, could preserve them from falling into poverty and barbarism.

The historical argument has been strengthened since Adam Smith's time by the adoption of the policy of *internal* free trade by all the great States and federations of States in Europe and America, and has been adopted also in the amalgamations of separate colonies and provinces in various parts of the British Empire—*e.g.*, in Canada, Australia, and South Africa.

This uniformity in experience in the adoption of *internal* free trade offers a very remarkable contrast with the general adoption of the opposite policy in external relations, and it calls for special consideration.

What, then, is the essential difference which apparently impels every great developed State to adopt internal free trade, and also, if we except the United Kingdom, to adopt some form of external protection? This striking difference suggests that the policy of free trade cannot rest on a few simple dogmas universally applicable, but must be supported by different reasons in different circumstances.

We can, of course, make the doctrine of free trade simple and universal by making the necessary assumptions and hypotheses; but, as was so well observed by Sir Henry Maine, the value of the conclusion attained by this method of abstraction depends on the relative value of the elements rejected and the elements retained. And to estimate the relative values of our assumptions we must test them as Adam Smith did—by the appeal to experience.

The first assumption in the ordinary free-trade argument is that if, through foreign importation, labour and capital are

displaced, they will find employment in the home country equally advantageous to themselves, and on the whole more advantageous to the country. It is implied that the productive forces are practically imprisoned within each country, and that only the products are interchangeable.

The second assumption is that within the country the imprisoned forces have perfect freedom, and may be directed to any employment as profit or advantage directs.

When we test the first of these assumptions we find that in the course of economic progress, and especially in the course of the present generation, capital has become less national and more cosmopolitan; but even in Adam Smith's time the international mobility of capital was recognised.¹ Accordingly, if by foreign imports the capital of any industry is displaced, it is possible that, instead of going to something else in the home country, it may be sent abroad. Some of it, of course, may be lost entirely if in a specialised form and really affixed to the place. The same is true, in a lessened degree, of the living capital labour. It may emigrate, or it may fall into less advantageous employment, or be lost in unemployment or pauperism.

Another prominent fact in economic progress is the growing tendency to production on a larger and larger scale. The economy of large production makes every nation anxious to keep its home markets and expand as widely as possible its foreign markets.

If we apply these facts to the questions of internal and external free trade, we see that the advantage of free trade may be very different in the two cases. By the breaking down of internal barriers the mobility of labour and capital within the country or the federated States is increased, and if one locality suffers, another within the country gains still more; and therefore, so far as internal free trade is concerned, encouragement is given on the whole to home employments. And in the case of internal free trade, the assumption of the retention of the productive forces within the country is also legitimate; in fact, this is implied in the very word "internal."

Similarly also the abolition of internal barriers admits of the extension of the scale of production, and the nation as a whole

¹ "A merchant, it has been said very properly, is not necessarily the citizen of any particular country. It is in a great measure indifferent to him from what particular place he carries on his trade; and a very trifling disgust will make him remove his capital, and together with it all the industry which it supports from one country to another. No part of it can be said to belong to any particular country, till it has been spread, as it were, over the face of that country either in buildings or the lasting improvements of lands." *Wealth of Nations*, Book III., ch. IV., last para.

benefits by the economies introduced. And since the home market is, in general, the principal market, and by internal free trade its organisation is improved, in this respect also the country gains by internal free trade.

But with external free trade it may happen that capital and labour will be displaced to foreign parts; and it may happen also that to the foreigner will be given the benefit of large scale production by admission to the home markets; that so far home industries are contracted, and that home industry must compete with increasing difficulty with an expanding foreign industry.

Adam Smith, in his treatment of foreign trade, always emphasised the importance of the home market and of the home employment of labour, but he insisted also that in the natural course of the progress of opulence the export of surplus products becomes of increasing importance. And from this point of view access to foreign markets must be obtained; and it is for this reason that the recovery or retention of a great foreign market by means of retaliation may be good policy.

In the limits of time available it is impossible to deal more fully with this interesting contrast; but I venture to say first that, as regards the policy of internal free trade, the assumptions, on which the arguments in its favour are based, are very generally realised; but, secondly, that, with regard to external free trade, the case is not so simple—that the advantage depends on the realisation of another set of conditions, and an appeal to experience is necessary.

At this point, however, a protest must be made against the idea that the rejection of the simple universal argument for external free trade—*i.e.*, free trade with foreign countries—means the acceptance of the similar easy and simple argument in favour of dogmatic protection. If the assumption needs proof that the labour and capital displaced by foreign imports will find employment in the home country, the assumption equally needs proof that if we exclude foreign imports, of necessity we obtain an augmentation of industry and an increase of consuming power. If the case for protection were so simple and obvious, the policy of a Chinese isolation would be universally adopted, or at best trade would be confined entirely to things which a country could not produce for itself.

To resume. The case for internal free trade within the British Empire from the point of view here taken up must depend largely on the reality of the idea of imperial union, as contrasted with the idea of independent nationalities. And in this way we see

the importance of the inter-connection of the various aspects of imperial union. Everything, from defence downwards, which tends to promote common interests and the reality of union, is favourable to the adoption of internal or inter-imperial free trade; and this again is favourable to the other objects of internal union.

It is, of course, possible to argue the case from the point of view of the mutual advantage of the inter-dependent parts in each and every case. We may try to show that each and every colony and possession would gain by breaking down its protective duties against the Mother-country, and if the argument on these lines were successful, it would be the strongest of all. And without postulating such a surprising harmony of interests, it may be granted that there is a good deal of truth in the contention. With internal free trade, labour and capital would flow much more readily from the old country, where they are superabundant, to the new countries, where they are most needed; and all the colonies need more capital and labour.

It is rather astonishing, however, to find that those who lay most stress on the simple dogmatic argument for free trade, who think that for the United Kingdom the smallest differential duty would be dangerous, if not fatal, to its prosperity, are the very people who seem to think that with the colonies the case for free trade—even with the Mother-country—cannot even be argued. The colonies, we are told, have definitely made up their minds that never will they accept the policy of internal free trade. But why should the colonies be so obstinate and so foolish if free trade is always the best policy?

The truth is, we are again forced to appeal to experience and to take account of actual facts and conditions.

If we look to history we find that the policy of internal free trade adopted by great States and federations of States has led to losses in some places and gains in others. The adoption of internal free trade in the British Empire would no doubt also have a complex result: there would be local losses as well as local gains, and there would be a certain disturbance of vested interests. In order, then, to induce the various parts to consent to this disturbance, the general gains of imperial union must be made convincing.

And this naturally leads up to the consideration of the external commercial relations of the Empire. In this matter, as pointed out already, the policy of most confederations has been opposed to free trade; and external protection has been supposed to promote consolidation and in that way to promote also internal

free trade. The question is worth consideration—whether some sacrifice of external free trade by this country might not be more than compensated by a similar extension of internal free trade? And whether it might not be worth some sacrifice to have some general agreement on the commercial policy of the Empire in relation to foreign States, so as to promote in this way also the sense of community of interests, and again, incidentally, to break down the internal barriers.

It was said by Bentham, who in the matter of the importance of security was a veritable monomaniac, that it is sometimes necessary to sacrifice security to security; and surely the parallel is obvious, that sometimes, in the interests of free trade, freedom must be sacrificed to freedom. Internal free trade within the Empire would surely be worth the sacrifice—if necessary—of a certain amount of free trade with foreign countries.

I do not mean to assert that the ideal of inter-imperial free trade can only be realised if as a preliminary this country abandons its policy of external free trade and shares in a policy of imperial protection. All I mean to assert is that the advantages of internal free trade throughout the Empire may, in the course of time, be so great that, if necessary, a compromise should be effected between the external policy of the Mother-country and that of the colonies.

The ideal of internal free trade can in any case only be gradually realised by Britain. The full adoption by Britain of the policy of external free trade was not completed in much less than a hundred years after the publication of the *Wealth of Nations*, though it began with Pitt's treaty with France in 1786. The repeal of the Corn Laws was not the beginning nor the end of the battle; it was only the most striking incident in the middle of it. Nor was the battle won merely by a conclamation of popular war cries; the great financial statements of Mr. Gladstone were crammed with facts, and the progress made towards the ideal was adjusted to circumstances.

And in the same way, if the ideal of inter-imperial free trade is to be realised, we must be prepared to advance step by step. But at this point, perhaps, I may be permitted to insist on the platitude that if progress is to be made, the steps taken ought to be forwards and not backwards, and to illustrate the platitude by the assertion that to impose taxes on colonial products that at present have a free entrance to our markets, even if accompanied by higher duties on the foreigner, looks very like a step backwards. With the markets of this country open to the rest of the Empire, half the journey is already accomplished.

At the same time, in the pursuit of internal free trade within the Empire, we must be prepared to look to the spirit and not to the letter of the law; we must take a broad view of the total effects of our policy and a broad view even of the meaning of our policy. With Adam Smith and the succession of great statesmen and thinkers who carried some of his ideas into practice, free trade did not mean the abolition of all Customs duties; and it was only in recent years that it came to mean the imposition for every Customs of an Excise exactly equivalent. The abolition of the shilling duty on corn in 1869 may be said to mark the passage of free trade from a broad working principle to a narrow creed.

The practical object of free trade is to get rid of or to avoid the evils of the policy of restrictions and monopolies. But in the matter of raising revenue the ideal rules of taxation must give way to the practical necessity of productiveness. For the sake of this practical rule, every one of the canons of Adam Smith has been more or less disregarded. Listen to the master himself: "After all the proper subjects of taxation have been exhausted, if the exigencies of the State still continue to require new taxes, they must be imposed upon improper ones." And he goes on to approve of the taxes imposed by Holland upon the necessities of life in order to meet the expenses of the wars for national independence and the expenses of the great embankments necessary for national existence.

Adam Smith proposed a uniform system of Customs, and this ideal has been carried into effect by great modern federations—*e.g.*, Germany and the U.S.A. But having regard to the absence of territorial contiguity and the variations in the economic conditions of the British Empire, a perfectly uniform system of Customs duties may not be attainable. But if uniformity is not attainable in practical details, there may well be a general agreement on the principles to be applied; and the power of the Empire might be used either for the negotiation of treaties or for applying the pressure of retaliation.

In dealing with this part of the imperial question, it must be remembered that, judging by the experience of other great confederations, just as the presumption is in favour of internal free trade, so the presumption in external relations is in favour of partial restrictions on foreign imports. But in neither case is the presumption proof, and again, as always, we are driven to detailed consideration of actual conditions.

Although in modern federations the central authority relies largely on Customs duties, there is no valid reason why part of

the imperial revenue should not be raised, as Adam Smith proposed, from other sources, especially from the growing economic rent of land.¹ Nothing could well appear more equitable than that the rent which arises from the general progress of any society should be used for the security and the advancement of that society; and if this security and advancement are promoted by imperial union, the union should share in the profit. Moreover, such a tax on the unearned increment of land would have a balancing or compensating effect on any redistribution of wealth and population that might be the effect of the adoption of internal free trade.

Time will not permit of even a reference to other possible benefits of imperial union. There is, for example, the treatment of subject races on the one side and the treatment of the great monopolies of capital on the other; there is the conduct of emigration and immigration; and, to make a summary condensation, there are all those other projects which may be brought under the duty assigned by Adam Smith to the State—the duty, namely, of erecting and maintaining certain public works and institutions which it can never be for the interest of individuals to maintain. But, in such an extension of the industrial domain, the rule would be that the imperial authorities should intervene only when the local States were unfitted for the task.

Let me now, in conclusion, try to express in short compass the main trend of the argument. The basis is the scheme of imperial federation propounded by Adam Smith. The foundation of the whole scheme is the necessity of defence; imperial defence ought to be regarded not as the last luxury but as the first necessary. War and the fear of war have been the great agents in promoting the federation of independent or quasi-independent States, for the attainment of this primary object of political union. In the matter of defence, the method of friendly alliances, or the method of coincidence based on voluntary contributions, coupled with independent control, cannot be compared in efficiency with the method of central organisation—especially in a system of defence in which the basis must be the naval power. But, as all history shows, the method of voluntary contributions may be a necessary stage in development.

Continuous defence involves, if the federal or imperial idea is to be the aim, a continuous revenue, growing with the needs of the federation or the empire, and a continuing central authority

¹ The policy of the Labour party, which has just come into power in Australia, is to pay for naval defence by taxes on land.

in which every constituent is represented to adjust the expenditure, and also to approve and determine the policy of the Empire in questions which may involve the issues—peace or war.

But a union for defence of the kind described would naturally involve union for the attainment of other objects. Amongst these, internal free trade between the parts of the Empire appears, in the light of history (as in the scheme of Adam Smith), to take the position second only in importance to defence. Closely associated with this adjustment of internal commercial relations would be an agreement, at any rate in principle, as to the external commercial relations with foreign States. Finally, there are the other varied duties which experience shows may be best undertaken by the imperial authority. The great danger of imperialism—the danger of over-centralisation and over government—which contributed so greatly to the fall of the Roman Empire—this danger will be avoided if we hold to the guiding principle of Adam Smith: to entrust to no government what can be as well done by the individual, and to no central authority what can be left to local governments. By this simple rule, room is left for the full development of the ideals of nationality: Canada for the Canadians, Africa for the Africans, and so on; and the objections founded on the abandonment of acquired or incipient sovereign rights disappear.

Such are the broad features of the scheme. But it will be objected that imperial federation of the kind proposed has already been tried in the balance and found wanting. According to this view, colonial opinions once expressed are to be considered as final and as unalterable as the laws of the ancient Medes and Persians. Surely nothing could be more unreasonable.

Why should we suppose that the people in the overseas dominions, who relatively to us in this country are free from the oppression of social and political traditions, and with everything in their environment to stimulate freedom of thought and freedom of movement, why should we suppose that of all the peoples on the earth they alone must have their future destinies decided once for all by the uncertain and divided opinion of the present day and generation? If the old men in this old land can dream dreams, are the young men overseas too dull to see visions?

And if once the ideal of Empire is recognised as desirable, the changes of recent years—of very recent years—are all favourable to the beginnings of realisation and to laying the foundations on the right lines. •

In 1862 a resolution of the House of Commons declared that
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the colonies, which enjoy self-government, should undertake the responsibility and the cost of their own military defence. The commentary of Sir Erskine May¹ is instructive. "To carry this policy into effect," he says, "must be the work of time. But whenever it may be effected, the last material bond of connection with the colonies will have been severed; and the colonial States, acknowledging the honorary sovereignty of England, and fully armed for self-defence—as well against herself as others—will have grown out of the dependencies of the British Empire." Mark the words: "the honorary sovereignty of England," and the colonial forces fully armed for defence—even against the Mother-country. And yet, such is the power of political tradition, that in the next sentence we are told: "They (*i.e.*, the colonies) will still look to England in time of war for at least naval protection; and in peace they will continue to imitate her laws and institutions, and to glory in the proud distinction of British citizenship."

Is it too much to say that the recent acceptance by the colonies of the responsibility for naval defence, instead of severing the last bond of material connection, has, on the contrary, checked the tendency to disintegration and initiated new ideas for the development of common interests?

Apart from details, what was the vital principle that animated the speeches of the colonial representatives at the Conference of 1907?

It was the anxiety and the eagerness to make some advance to real union, not only in defence but in any mode by which the parts of the Empire might be more closely united. It was not that the representatives of this country asked for assistance, even for defence, but that those from the other side offered to come over and help us. Their insistence on the need for commercial preference, again, seemed not so much to be based on the idea of possible gain to themselves as on the idea of recognition of community of interests.

And what were the obstacles? The colonies said (through their representatives) that it was the fetish of free trade worshipped by us; but it might well be replied it was just as much the idol of the market place—fiscal autonomy—worshipped by them.

The most recent experience of all, so recent that it is still in the very act of becoming an experience, is the recognition by both the great political parties of this country that constitutional changes of vital importance must be introduced into the Parlia-

¹ *Constitutional History of England*, Vol. III., ch. XVII., p. 376 (6th edition).

ment of the United Kingdom. There is unanimity, or practical unanimity, on one point, and that is that something must be done. And that, fortunately, is the only point of importance for the present argument. The minds of the people of this country are being turned to the first principles of government. And it is quite possible that before they have finished their examination, they will ask the question: Is the British Parliament, in any true sense of the term, an imperial Parliament? and if it is, by what curious subconscious methods are the parts of the Empire beyond the limits of the United Kingdom represented? And cannot this subconscious method be improved upon?

The times are favourable for putting once more the question of imperial federation, and circumstances, alike in foreign countries, in the colonies, and in this country, demand that some practical answer should be given. But if we follow the wisdom of Adam Smith¹ by a practical answer, we do not mean that we are to set about the immediate realisation of the ideal, "completely and in all its parts, without any regard either to the great interests or to the strong prejudices which may oppose it." That would be the folly of the man of system. "The true statesman," he says, "like Solon, when he cannot establish the best system, will try to establish the best the people can bear, and when he cannot establish the right, he will not disdain to ameliorate the wrong." We must in the life of nations allow time for growth and time for decay, and in the life of nations even a century may be a short period.

J. SHIELD NICHOLSON

¹ *Theory of Moral Sentiments*. Part VI., section II. This part was added by Adam Smith in the last year of his life, 1790, and may be taken as giving his mature views on "nationalism" and "defence."

COMPULSORY INSURANCE AGAINST UNEMPLOYMENT.

I

THE chief advantage of compulsory insurance is that every person is thus bound to make provision, whereas in a voluntary scheme the very persons who most need to make provision are often the least likely to avail themselves of the opportunity.

There are other incidental advantages. The cost of administration can be kept lower in certain respects than in a voluntary scheme. Contributions can be collected through employers, for instance. Further, through a system of compulsory insurance, the State can easily keep its finger on the pulse of industry.

But there are many disadvantages, especially if use be not made of voluntary associations.

(a) The scheme of compulsory insurance may not be so comprehensive as may at first appear. Large numbers of workmen who are much subject to unemployment may fall out of the scheme because of their inability to keep within it. But it may be contended that insurance is no more applicable to such cases than a curative hospital is suitable for a chronic invalid.

(b) Control of unemployment may be difficult. A compulsory scheme must be run, in part at least, by the State. How is the State going to make sure that a man is genuinely unemployed? Much can be done through a well-developed system of labour exchanges; but it is doubtful whether in the near future the ordinary operations of the exchanges will be so extensive, whether they will be so generally used by employers, that an effective check on unemployment can be exercised through them alone. In the branches of the trade unions there is exercised the close mutual check of fellow-workmen, well acquainted with each other and the conditions of industry in the locality. They have to bear one another's burdens through their contributions, and have

every incentive to see that no man unfairly burdens his neighbour. In a State scheme such stern self-interest will not operate, and it is well known that the conscience of the ordinary person is remarkably slack in the matter of cheating that intangible entity—the State. Not unseldom is a man not ashamed to cheat the State; he is even proud of having tricked an official. It is not likely that a new conscience in these matters will arise with a compulsory scheme of insurance.

(c) Actuarial difficulties are considerable in insurance against unemployment. Some may question whether a State scheme will possess that flexibility of contributions and benefits which can be secured without much difficulty when workmen are organised in their own associations.

(d) On the whole, it is more beneficial, both to the individual and to the community, that a person should be induced to a desirable course of conduct rather than that he should be coerced. Coercion is mechanical. The quality of living things is to respond to stimuli. They possess vitality in the degree in which they do respond, and men and society are living things. It may well be that the advantages of compulsory insurance more than counterbalance any disadvantages, but the disadvantages should not be overlooked.

(e) Perhaps most important of all, the educative influence on workmen of managing organisations started and maintained by themselves would be lost, unless use is made of such organisations in the compulsory scheme. It is difficult to exaggerate the importance of this consideration, as difficult as to exaggerate the influence of the light and heat of the sun on the growth of flower and tree. Any system of insurance must be tested, not solely by its effect on provision against unemployment, but also by the measure in which it fosters general progress, and no factor is more essential to the progress of the working classes than the development of habits of self-management.

11.—CONTINENTAL EXPERIENCE.

(1) ST. GALL.

Compulsory insurance against unemployment has been actually tried at one place only, at St. Gall, in Switzerland. Mr. Schloss, in this country, has given very full accounts of the scheme and of its operations.

A law was passed in 1894 in the Canton of St. Gall, which authorised any commune to set up a scheme of compulsory insurance against unemployment. Insurance could be made compulsory for all workmen earning not more than 4s. a day, unless they were equally insured otherwise. Insurance could be made optional for persons earning more than 4s. a day. The local authority could also make the insurance compulsory for women.

Insured members were to pay contributions. A subsidy was to be granted by the local commune and the canton, and a further subsidy was to be obtained, if possible, from the Confederation. Gifts could also be received.

The town of St. Gall adopted the scheme of compulsory insurance. It tried to get two neighbouring communes to join. Both ultimately refused. In one especially, the workmen would have nothing to do with the proposal. The scheme was in force in the town of St. Gall for two years. It was then abandoned, mainly at the instance of the better class of workmen.

The scheme was badly conceived and as badly executed. Large numbers of workmen were not insured, although many were fined. Messengers and commissionaires, and persons employed in the postal and the telegraph service and on railways, were exempted, the former because it would have been extremely difficult to verify unemployment in their case, the latter because practically they were never unemployed except through their own fault. It is very doubtful whether the law permitted these exemptions. It was found very difficult to get members to pay their premiums. Many migrated rather than pay.

There was no adequate check of unemployment. Persons drew benefit who had no legal right to benefit. Workmen who usually at certain seasons left the town for country work now stopped in town and drew benefit. It is said that much of the money received in benefit was spent in the public-houses.

The scheme was administered by the Poor-Law Department, and therefore became connected with the Poor Law in the minds of the people. The officer in charge had a large amount of additional work thrown on his shoulders, but was not given additional pay.

The better class of workmen, from the beginning suspicious of the scheme, became the more bitterly opposed to it when they saw the abuses which arose. Opposition seems to have been the stronger because employers were not required to contribute. Ultimately the opposition to the scheme and its manifest failure brought it to an early end.

It is unfortunate that the one scheme of compulsory insurance against unemployment which has actually been put into practice should have been discarded largely because of palpable defects of administration without a fair test of the principles on which it was based.

(2) ZURICH.

In 1898 a scheme of compulsory insurance was brought forward in the Town Council of Zurich.

Insurance was to be compulsory on workmen earning less than a certain rate. As at St. Gall, subsidies were to be received from the commune and canton, and, if possible, from the Confederation. Employers were to contribute, and the contributions of workmen were to be collected through them. The rates of contributions for the workmen differed according to earnings, but were higher in the building trade. Benefit varied according to usual wages and the number of dependants. The proposed scheme was not carried.

(3) BASLE.

The most important proposals which have yet been passed by a legislative body regarding compulsory insurance against unemployment were those made at Basle in 1899. A bill was originally drafted in 1893 with the assistance of Dr. Adler, one of the principal authorities in Switzerland on the question. After very mature consideration, a bill was ultimately passed through the Great Council in 1899, by forty-six votes to twelve, establishing a compulsory system of insurance against unemployment.

The bill was very carefully drawn up. All wage-earners engaged in factory, building, or earth work, earning less than £72 per annum, were to be insured, with certain minor exceptions. The rate of contributions varied according to—

(a) The occupation and the degree to which it was subject to unemployment.

(b) Wages earned.

There were four classes in each of these sections, making in all sixteen possible rates of contribution. The rates ranged from $\frac{1}{4}d.$ to $4\frac{3}{4}d.$ per week, and were to be collected through the employer.

Benefit varied according to—

(a) Wages—there were four classes corresponding to the four classes in rates of contribution.

(b) The number of dependants.

This latter consideration was a departure from the strict principles of insurance. Benefit ranged from 6½*d.* to 1*s.* 7½*d.* per day. Provision was made for the cases of persons working short time, and of unemployed persons engaged in bye-employments.

Employers were to contribute 1*d.* per week in some cases, 2*d.* per week in others. The canton was to bear the cost of administration, and was also to pay a subsidy of £1,200 per annum. The amount of the subsidy was fixed at a comparatively high figure in the expectation that the expenditure which had been necessitated in former years to relieve the unemployed would be reduced in consequence of the scheme of insurance. A reserve fund was gradually to be built up. The scheme was to be under the management of a committee, which was to contain representatives of employers and insured members.

A proposal made in the Great Council that the bill should be submitted to referendum was rejected. But after its passage through the Great Council, the required number of electors petitioned for the referendum. The bill was therefore submitted to the public vote. It was decisively rejected, 5,458 votes being cast against it, and only 1,120 for it. The total electorate numbered over 16,000, so that the number of abstentions was large. It is a remarkable fact, especially having regard to the large majority against the bill, that it was supported by newspapers of all parties.

The opposition came from employers and employed, and, on the whole, it is probable that in this instance at least the people were wiser than their legislators. Dr. Mangold, the cantonal statistician, who has closely studied the problem in Basle, wrote, in 1906 : “. . . each winter in part, the same persons, who form relatively a small proportion of the total number of workmen, become unemployed. It is clear that it does not pay to set up for these persons so elaborate machinery as the compulsory scheme of insurance proposed in 1899.”

(4) GENERAL.

Leaving to be considered lastly the scheme which has been foreshadowed for the United Kingdom, several other suggestions have been made for establishing compulsory schemes of insurance against unemployment. During the last decade of the nineteenth century quite a strong wave of feeling seems to have passed over Switzerland, Germany, and France in favour of compulsory insurance against unemployment. The stress from unemployment which marked some of the early years of the decade made men

quick to run to plausible remedies. In the next decade, the wave subsided to a small ripple. Whether it will rise again, whether the proposals made in this country will once more stir the waters, especially if the proposals issue forth in the full strength of law, remains to be seen.

In Germany the subject has been much discussed. The elaborate report on insurance against unemployment, issued by the Imperial Statistical Office in 1906, poured cold water on compulsory schemes. In the Reichstag in November, 1908, Herr von Bethmann Hollweg, then Minister of the Interior, said that the Government had no present intention of introducing compulsory insurance against unemployment, and that he was not aware that any proposals existed which overcame the practical difficulties involved.

Many schemes have been privately suggested. The imposing structures of compulsory insurance which already exist have naturally awakened thoughts that insurance against unemployment should be joined on to them. Some recommend that such insurance should be worked with the present institutions for sick insurance, while others consider the institutions for insurance against invalidity and old age more suitable. It has also been suggested that option should be granted to the communes to make insurance compulsory within their areas.

Dr. Freund, president of the district insurance office at Berlin, and one of the originators of the Berlin Labour Exchange, has advocated that compulsory insurance should be worked in conjunction with the labour exchanges. In this respect, he anticipates the scheme foreshadowed for this country. It is provided in his proposals that a higher rate of benefit should be given when the recipient has children dependent on him. He thus introduces a principle alien to strict insurance.

One of the most interesting proposals made in Germany, not only because of the high source from which it issues, but also because of the principles on which it is based, is the scheme suggested by Dr. Zacher, formerly president of the Imperial Insurance Office. He considers that unemployment due to strictly industrial causes is a risk analogous to that of industrial accident. In Germany, employers have to form themselves into associations, and have themselves to provide the premiums, to secure to their workmen insurance against industrial accidents. Use the same associations, with contributions only from the employers, recommends Dr. Zacher, for unemployment due strictly to industrial causes, as distinguished from unemployment due to personal

causes, and excluding also seasonal unemployment. Unemployment of purely industrial origin, he contends, which is "an inevitable consequence of capitalist production, cannot be mitigated—perhaps it can be suppressed—except by an insurance of which the contributions are paid by the masters of industry. Any other system which tends to burden other shoulders with the cost of insurance against unemployment is illogical." Apart from questions of principle, the great practical difficulties of such a scheme are obvious.

These and other proposals for compulsory insurance which have been put forward in Germany have up to the present borne no fruit in legislation.

In France, also, many proposals have been made. In 1903 the question was fully considered by the Conseil supérieur du travail. The Conseil pronounced against compulsory insurance. In the course of the inquiry, the probable cost of compulsory insurance was considered, and, assuming that the State provided a fourth of the necessary contribution, and allowing for restrictions as to the period of benefit, it was estimated that the cost would exceed £1,500,000. The Government did not embark on compulsory insurance, and contented themselves with subsidising insurance effected through voluntary organisations.

In Switzerland some schemes were put forward in addition to those which have been described. None were adopted. In Norway and Denmark laws were passed in 1906 and 1907 respectively, providing for Governmental assistance to insurance against unemployment. In both countries the laws were passed after inquiries had been made into the subject. In neither country was compulsory insurance adopted.

So far as can be gathered, the attitude of the workman on the Continent towards compulsory insurance against unemployment is generally one of suspicion. He begrudges the compulsory contribution, and fears that he would be mulcted to provide benefit for less competent or less deserving members of his class.

III

THE UNITED KINGDOM.

The scheme foreshadowed for the United Kingdom is the most extensive which has yet been authoritatively put forward. Particulars of this scheme have not been officially published, and information has to be gleaned from reports of speeches and of interviews, and it seems very doubtful if all the details are correct, or, if correct at the time when reported, will not be considerably

modified when the bill emerges complete from its shell. With this reserve, it will be interesting to consider what is stated to be the measures which are proposed.

Insurance is to be made compulsory on workmen employed in certain trades—the building trade, construction works generally, shipbuilding, engineering, and vehicle making. These trades appear to have been chosen because in them unemployment is most severe. In the trades some 2,250,000 persons are employed, about one-third of the total engaged in industrial occupations, or about a half if we exclude such occupations as coal-mining and textile and railway work, in which slackness is met by working short time.

Contributions will differ in the several trades according to the risk of unemployment. Equal amounts are to be contributed by the insured workman, the employer, and the State, and it is considered that each will contribute weekly about 2*d.* or 2½*d.* The contributions of the workmen will be collected through the employer. The State will bear the cost of administration, and it is estimated that the charge to the State in cost of administration and of contribution will be some £1,500,000 the year.

Benefit is to be at the rate of about 7*s.* or 8*s.* a week. It is to be granted for a limited time, probably not more than fifteen weeks in one year, or twenty weeks if the benefit is at a lower rate. A person has to pay contributions for eight months before he becomes entitled to benefit. A person who exhausts his limit of benefit in any one year has to wait longer before he becomes entitled to benefit in the next. If he again exhausts his benefit in the following year he has to wait still longer, and so on, the waiting period progressively rising to the extent that benefit is exhausted. It is hoped thus to weed out the chronically unemployed. The scheme is to be worked in conjunction with the labour exchanges. Unemployed members must take work offered to them through the labour exchange on penalty of forfeiting their right to benefit if they cannot satisfy the committee of the exchange that their refusal is justified. This committee will contain representatives of employers and workmen.

Workmen and associations other than those in the scheduled trades may join the scheme of insurance, but apparently not on such favourable terms as those for whom insurance is compulsory.

Several questions arise with regard to the scheme..

(a) How far will the compulsory insurance be effective? Many persons will drop out of the scheme; the chronically unemployed will be weeded out. Municipalities will not be much

relieved in the problem of unemployment which immediately troubles them. But, as already explained, it is scarcely the work of a scheme of insurance to provide for the chronically unemployed, nor is it socially desirable that it should.

(b) Apparently it is not contemplated to make use of existing organisations, trade unions more especially, for dealing with insurance against unemployment. It may be considered that there is difficulty in using such organisations in a compulsory scheme of insurance, especially if employers are to be required to contribute liberally.

In a report by Messrs. Shackleton, M.P., and Barnes, M.P., published in 1909, these trade union leaders pronounced, as between different schemes of assistance, in favour of a system by which unemployment benefit was subsidised through trade unions. In the Trade Union Congress held in September, 1909, Mr. Shackleton, as president, spoke in favour of the scheme foreshadowed by the Liberal Government. The Parliamentary Committee of the Congress reported in support of the scheme, and pronounced it to be "bold and comprehensive," and the Congress adopted the report. The same Congress rejected a proposal that the Treasury should be asked to grant a subsidy to trade unions in respect of unemployment benefit provided by them. It therefore seems that, at present at least, the auspices from the trade union quarter are favourable to the scheme of the Government. Whether they will continue so favourable when the scheme is more fully considered is perhaps not quite so certain, unless, as seems on the whole not unlikely, the scheme contains some recognition of what the trade unions are doing to provide against unemployment.

(c) The scheme only applies to about a third of the industrial workers of the country. No doubt, if successful in these trades, it will be applied to other trades. But workers in the latter trades may complain because they do not immediately receive the benefit of subsidy from State and employer. Further, the coal-miner and the cotton-worker, though they partially break the fall of unemployment by short time, none the less have to bear the burden of unemployment, and may claim that they should not be deprived of their proportion of assistance simply because they make provision in some way other than through insurance.

(d) The contributions to be required from the employer^a are proportionately large. It seems not improbable that the proportion to be required has been overstated. If it remains at its present figure, opposition may be roused, especially if employers

are to be required to contribute towards other schemes of insurance—against sickness or invalidity.

(e) The proportion of the contribution to be required of the workmen is low. Some may doubt whether one-third is an adequate sacrifice to be required of him. The question is not simply one of social justice, whatever that may mean, but much more a question of social expediency, of the consequences likely to result from the course proposed.

The questions which have been raised are not necessarily fatal to the scheme, much less to the principles which underlie the proposals. Any scheme of this nature must inevitably be subject to criticisms at many points. Whether the advantages of compulsory insurance outweigh the disadvantages; whether, despite the possible difficulties, the experiment holds so much prospect of good as to justify the trial, can only be ascertained by fully considering the needs of the period, the alternative measures which might be taken, and the experience of the other forms of assisted insurance which have been tried within recent years at so many places on the Continent.

I. G. GIBBON

THE HISTORICAL BASIS OF ENGLISH POOR-LAW POLICY.

MR. and MRS. WEBB'S "English Poor-Law Policy"¹ is written in the interests of a well-known propaganda, and aims at showing that the principles and policy advocated by that propaganda are the inevitable outcome of the past. "It is here not a question of whether we approve of this evolution of policy, or of whether we should seek to promote or to resist it, but merely of what exactly it has been, and therefore now is" (p. vi). They express in their Preface their surprise that no such chronological analysis of policy as theirs has ever before been undertaken; and attribute to the difficulty of the undertaking "this general reluctance to work out, from the materials themselves, the Poor-Law history of the last three-quarters of a century." To students of Poor-Law history the surprise will be, we think, at this uncalled-for depreciation of the excellent work of such historians as Sir G. Nicholls, Mr. Mackay, and Sir W. Chance.

The material from which the authors themselves set out to write Poor-Law history consists of the "Statutes, Orders, Circulars, Minutes, Reports, Letters, &c.," of the Central Authority, together with the manuscript records and letter-books of a score of Boards of Guardians (p. vii). In defence of previous historians, whose work will certainly not be superseded by this essay, it may be pointed out that Poor-Law history is not, for the most part, made at the Local Government Board; it is not even chronicled there to any great extent. It is made at 600 Boards of Guardians, acting on their own responsibility within the very wide limits prescribed by the Local Government Board, and able to develop policies so opposed to one another as that of Poplar on the one hand and Whitechapel on the other. Hence previous historians have been amply justified in preferring to the mere chronological analysis of Statutes, Orders, Circulars, &c. (many of which have had little or no effect upon actual

¹ *English Poor-Law Policy*. By Beatrice and Sidney Webb. Longmans, Green and Co. Pp. xiii, 379.

practice), a method which should bring their readers more into touch with reality.

The Preface also describes at some length, "as an instance of sociological method," the plan upon which the writers dealt with the mass of documentary material which they accumulated. It consisted in employing assistants to copy out "the expressions of policy embodied in each document . . . on loose sheets of paper of even size and shape" (pp. vii, viii). Then the loose sheets were sorted by subjects and arranged chronologically, and from them the history was written. It was no doubt a heavy task, taking some twelve months in all to complete; but whether it is properly to be dignified by the name of a "sociological method" is doubtful. Every student, we suppose, makes notes; and everyone who has made an index is familiar with the dodge of writing his entries on separate slips and then sorting them out. From the point of view of the historian the plan is open to the grave objection that the excerpts are very effectively separated from their context, which may lead to serious errors in interpretation, especially when the person who makes the excerpts is not the person who writes the history. The authors claim to have done their work with "scrupulous accuracy and exhaustiveness" (p. viii).

What is it that the work sets out to prove? It is this: That Poor-Law Policy as based upon the Report of 1834 was originally guided by three Principles; that in 1907 Poor-Law Policy was guided by three new Principles unknown in 1834; and that the Central Authority has in the interval been "reluctantly driven" from the one set of Principles to the other. The final step, of course, is to identify the Principles of 1907 with those of the Minority Report, and to accuse the Majority of ignorant muddling of the two sets. The whole argument is of surpassing ingenuity, but I submit that it does not stand the test of a reference to the original documents.

To disentangle the argument, and at the same time to do justice to its ingenuity, is a task of some difficulty. We may begin by enumerating the two sets of Principles, defining the new ones in the words of their discoverers. Those of 1834 are: (1) The Principle of *National Uniformity*, i.e., of national uniformity in the treatment of each class of destitute persons. (2) The Principle of *Less Eligibility*, i.e., that the condition of the pauper should be "less eligible" than that of the lowest grade of independent labourer. (3) The *Workhouse System*. (Ch. V.) The "New Principles unknown in 1834" are: (1) The Principle of *Curative Treatment*—"that is, of bringing about in the applicant actual

physical or mental improvement, so as to render him positively more fit than if he had abstained from applying for relief" (p. 264). (2) The Principle of *Universal Provision*—"that is, the provision by the State of particular services for all who will accept them, irrespective of 'destitution' or inability to provide the services independently" (p. 267). (3) The Principle of *Compulsion*, "in the sense of treating an individual in the way that the community deems best, whether he likes it or not" (p. 268).

These, then, are the *dramatis personæ*, and the plot of the story is to show the hero (the Poor-Law Commissioners, *alias* the Poor-Law Board, *alias* the Local Government Board, *alias* the Central Authority) driven reluctantly from the arms of the vicious Principles of 1834 into those of the virtuous Principles of 1907. The story told by the Majority is less dramatic: there is no plot, no hero to speak of, and no victory of virtue over vice. There is only, and perhaps this not really less interesting, the gradual evolution of the policy of 1834 as it adapts itself to the changing conditions of social and industrial life, and utilises the increasing resources of science and experience.

As an illustration of the method upon which the action of the piece is developed, let us take the case of Medical Relief. This is clearly an instance in which the policy of the Local Government Board in 1907 is guided by the Principle of Curative Treatment—"that is, of bringing about in the applicant actual physical or mental improvement, so as to render him positively more fit than if he had abstained from applying for relief." What has to be shown is, that the same Principle did not actuate the Commissioners of 1834, and the Poor-Law Board after them. Hence we find it stated that, "When the Commissioners came to sketch out the classification of their proposed workhouse institutions, they did not include anything in the nature of a hospital," and that "This omission of anything in the nature of proposals for indoor relief of the sick becomes the more significant when we notice that the Commissioners do allude with approval to a possible extension of institutional treatment for certain classes of defectives, such as lunatics and blind" (p. 8). On p. 118 we find this statement repeated in a stronger form: "We have shown that the institutional provision for the sick was not so much as mentioned in the Report of 1834." There is an air of proof about "we have shown" which is not justified, for when we turn to the Report of 1834 itself, we find it quite distinctly explained that, of the houses to be assigned to different classes of paupers, one is to be set aside for the sick: "in the workhouse of a single parish

the rooms appropriated for the use of the sick must often be empty; in a house for the reception of the sick from a number of parishes, the absence of patients from one parish would be met by an influx from another, and a more steady average maintained" (p. 313). Surely one of the slips of paper must have fallen under the table!

We come next to the authors' summary of the policy of the Central Authority in 1847, more especially as incorporated in the General Consolidated Order of that date. In section (X.), "The Workhouse of the General Consolidated Order of 1847," we are told that "Even the sick are almost entirely ignored in the Order of the Central Authority, and there is the very minimum of recognition of an hospital provision. The policy of the Central Authority at this date, in short, deliberately excluded any use of the workhouse for the curative, reformatory, or educational treatment of any class whatsoever" (p. 82). But turn to the Order itself, and what do we find? It provides for the appointment of a Medical Officer and Nurse in each workhouse (Article 153). It orders that every pauper on admission shall be examined by the medical officer, and if labouring under any disease of body or mind be placed in the sick ward or such other ward as the medical officer shall direct (Articles 91 and 92). It instructs the Guardians to consult with the medical officer from time to time, and make such arrangements as they may deem necessary with regard to persons labouring under any disease of body or mind (Article 99). It sets out in detail the duties of medical officer and nurse (Articles 207, 213). It provides that the Visiting Committee shall report to the Guardians their answers to the following questions: "Is regular attendance given by the medical officer? Are the inmates of the sick wards properly tended? Are the nurses efficient? Is there any infectious disease in the workhouse?" (Article 149).

With what justice can an authority which prescribes so carefully provision for the treatment of the sick be accused of deliberately excluding any use of the workhouse for the curative treatment of any class? That many Boards of Guardians failed in their interpretation of these instructions, and that in consequence the actual treatment of the sick was often unsatisfactory, is beyond dispute; but we are here dealing with the policy of the Central Authority as expressed in its Orders, which is another matter. The fact is that the Central Authority has always been in the unhappy position of endeavouring to hold together many thousands of Poor-Law Guardians and their officials to something

like a common policy, while those before cried "Forward!" and those behind cried "Back!"

By their suppression of relevant passages, the authors lead us skilfully up to the dramatic moment in the 'sixties when an inquiry instituted by the *Lancet* revealed the deficient condition of the workhouse infirmaries. It is represented as the moment of conversion of the Central Authority to the new Principle. "The Central Authority at once accepted the new standpoint. It made no attempt to resist the provision of the necessarily costly institutional treatment for the sick poor, whether or not their ailments were infectious or otherwise dangerous to the public. The progressive improvement of 'the hospital branch of Poor-Law administration,' to use the phrase of the Central Authority itself, which had in the preceding years grown up unawares, was now definitely accepted as an important feature of its policy" (pp. 119-20). It is difficult to see how, in face of the articles quoted above from the Order of 1847, the hospital branch of Poor-Law administration can be said to have grown up unawares. What we really have is no sudden conversion to a new Principle unknown in 1834, but a consistent development of the idea of special treatment for the sick ("curative treatment"), of which the germ was present in the special house for the sick indicated in the 1834 Report, which was elaborated in the General Consolidated Order of 1847, and which received great impetus in the movement for hospital reform from 1865 onwards to the present day.

But it is not only in relation to the sick that we find the "Principle of Curative Treatment" is a natural and consistent development from 1834. It is still more obvious in the case of the children that the policy of the Central Authority has always been to bring about "actual physical and mental improvement." From the very first stress was laid on the importance of providing education and training for the children, and the Consolidated Order of 1847 provides for the appointment of a schoolmaster and schoolmistress, and for the education by them of all the children in the workhouse under fifteen. And yet our authors can write: "The policy of the Central Authority at this date, in short, deliberately excluded any use of the workhouse for the curative, reformatory, or educational treatment of any class whatsoever" (p. 82).

The only sense in which this sweeping indictment applies is the strictly limited one that the Central Authority has never regarded the workhouse as a training-school for able-bodied adults. Both the Majority and Minority sections of the late Commission

believe that this class can be to some extent—how far is doubtful—treated on the same basis as the sick and immature; and if the recommendations of either are carried into effect there will be a real extension of the Principle of Curative Treatment to another class.

We have seen, then, that one of the "Principles of 1907" belongs just as truly to 1834. Let us now consider one of the "Principles of 1834"—the Principle of Less Eligibility in its original and special application to the treatment of the able-bodied pauper. We shall find it present in 1907 not only in the policy of the Central Authority, but also, and notwithstanding all disguises, in the Report of the Minority. This Principle is stated on p. 228 of the 1834 Report in the following words: "The first and most essential of all conditions, a principle which we find universally admitted, even by those whose practice is at variance with it, is that his (*i.e.*, the able-bodied pauper's) situation on the whole shall not be made really or apparently so eligible as the situation of the independent labourer of the lowest class." This does not mean that the relief given is to be inadequate, but that it is to be given under conditions such as will not tempt the independent "to quit the less eligible class of labourers and enter the more eligible class of paupers."

On pp. 261-3 the authors of *English Poor-Law Policy* suggest that the Central Authority has abandoned this Principle in respect to all but vagrants, but admit that there is no "explicit statement" to that effect (261-3). Since, however, the Central Authority is on trial only with regard to its explicit statements, that settles the question. The reference to the treatment of the able-bodied under the Unemployed Workmen Act is wholly misleading in dealing with the history of Poor-Law policy. The Act was created in order to get behind that policy, and its success in doing so has made of it a gigantic and admitted failure.

It is, indeed, inconceivable that any scheme for the relief of the able-bodied should be framed which is not, tacitly or avowedly, based upon the Principle of Less Eligibility. The pill may be sugared with eulogistic epithets, and gilded with the promise of lavish allowances; but not even a Socialist State could afford to offer to all comers a life of dependence which should be more eligible than one of independence. It is true that the Minority repudiate the Principle as "futile and barbarous in its inhumanity" (p. 358, *E. P. L. Policy*), and offer in its stead "full and honourable maintenance at the public expense" (Minority Report, p. 9216); but, still, it is there in their proposals, and there

so definitely that they anticipate having to apply their new Principle of Compulsion to induce some at least of the unemployed to accept their hospitality. To show the struggle which has gone on in the minds of the Minority between their desire to conceal a Principle which they have done so much to make unpopular and their recognition of its necessity, it is necessary to quote at some length from the Report itself. On p. 1204 we find a description of the treatment proposed for the able-bodied unemployed: "For the young unmarried man it would probably be best to send him at once to a residential settlement in the country, where he would be free from the distractions of town life" (a delightful euphemism!). "But whether in town or country, it is essential to successful treatment that the training should take up the man's entire day. If he is not at a residential colony, he will be required to be in attendance at 6 a.m., as he would be if he were in employment; and as the day's training will need to be diversified, and must include organised recreation of various kinds, his obligatory attendance will usually be prolonged until eight or nine at night." After an enumeration of the advantages of this treatment comes a significant defence: ". . . it is *not* agreeable to the 'average sensual man' to surrender himself continuously to an ordered round of continuous training of any sort under hygienic conditions, with every faculty kept alert by varied stimuli, so as to produce the highest state of physical and mental efficiency of which he is capable. In short, maintenance under training, whilst more 'eligible' in every sense than starvation in idleness, is less agreeable than the ordinary industrial employment at wages, in one's own occupation, with freedom to spend or misspend one's wages and one's leisure as is desired." But what is this "less agreeable" but the "less eligible" of 1834 over again? To find a mode of assistance which shall be preferable to starvation while it is not preferable to independent work for wages has been the Principle actuating the Central Authority from the beginning, and in theory at least the Minority does not deviate from it. Whether in practice their plan would work out quite as they intend is another question. We think they under-estimate the power of the normal man to defend himself against unwelcome "stimuli"; it might be measured by his state of mind during a sermon, or—if he be unmusical—at an orchestral concert. He is quite capable of preserving an air of intelligence which covers an absolute blank within so long as he is warm and fairly comfortable.

But what about "the freedom to spend or misspend one's wages and one's leisure as is desired," which is to attract the men

back into employment and away from the State training establishments? That it will be a very limited freedom appears when we turn the page. "So long as he commits no crime, and neglects none of his social obligations—so long as he does not fail to get lodging, food, and clothing for himself and his family—so long as his children are not found lacking medical attendance when ill, or underfed at school—so long, indeed, as neither he nor his family ask or require any form of Public Assistance, he will be free to live as he likes. But directly any of these things happen, it will be a condition that the husband and father, if certified as able-bodied, shall be in attendance at the Training Establishment to which he is assigned. If he is recalcitrant, he will be judicially committed to a Detention Colony."

But why should any man be "recalcitrant" to an offer of "full and honourable maintenance" unless it is to be accompanied by conditions which he does not like—i.e., which make it "less eligible" than his position, not only as an independent labourer, but as a man unable to maintain his family?

So far, then, we find that on examination two of the contrasted Principles of 1834 and 1907—perhaps the two most important—prove to be common to Poor-Law policy of both periods. We offer this result as an answer to a rhetorical statement of Mr. Webb's in the *Sociological Review* for April, 1909. "For what the Royal Commission of 1905-9 has done, in its Majority Report no less than in that of the Minority, has been to destroy the much vaunted 'Principles of 1834,' to reveal the intellectual bankruptcy of the policy so long inculcated by the headquarters of the Charity Organisation Society, and to 'smash, pulverise, and destroy' the whole Poor-Law system" (p. 128).

The case against him is strengthened when we pass to the two remaining "Principles of 1834"; they will take little space. The "Principle of National Uniformity" comes first, and it is, we are told, "in 1907, with one notable exception, in practice abandoned. Uniform national treatment is to-day obligatory with regard to one class only of destitute persons, the wayfarers or vagrants" (p. 258). In the sense that the Guardians do exercise a very wide discretion within the limits laid down by the Central Authority this is true (and just as true with respect to vagrants as to other classes), and it is the reason why—as we have already pointed out—Poor-Law history cannot be written from a study of official documents alone. But the argument, which proceeds by enumerating divergencies of practice with respect to the children and the sick, shows a hopeless confusion in the authors' minds

between a Principle and the practice in which it is embodied, between a policy and the various methods of carrying it into effect. Given the policy (*e.g.*) of providing the best treatment for the sick, it is clear that it may be achieved in some places by building a special infirmary, in others by subsidising a voluntary institution. What remains desirable is that the Central Authority should impress a uniform policy upon the nation, and though it has not completely succeeded in doing this, it has never abandoned the attempt. And once more we need only go to the Minority Report itself to find the "Principle of Uniformity" invoked as part of their scheme of reform. In Chapter VIII., on Cost and Recovery (pp. 944-5), the writers deprecate the "lack of principle and uniformity" in the process of charge on and recovery from individuals of the cost of maintenance, and lay down as urgent "the adoption of some uniform principle, with regard to charging or not charging, throughout the whole of each service."

The third "Principle of 1834" is said to be that of the "Workhouse System." "The workhouse system was recommended on the assumption that it was the only means by which the Principle of Less Eligibility could be enforced" (*English Poor-Law Policy*, p. 11). But in this sense the workhouse system is not a Principle at all; it is merely a mode of applying a Principle, one way amongst others of carrying out a given policy. There was indeed another principle as well as that of Less Eligibility in the minds of the Commission when they urged the use of the workhouse. It was not to act solely, or even mainly, as a test. It was intended also to put a stop to partial relief and the subsidising of wages, and so to carry out the principle upon which Friendly Societies base all their relief work. "On this point, as on many others, the independent labourers may be our best teachers. We have seen that in the administration of the funds of their friendly societies, they have long acted on the principle of rendering the condition of a person receiving their relief less eligible than that of an independent labourer. We have now to add that they also adopt and enforce most unrelentingly the principle that under no circumstances, and with no exceptions, shall any member of their societies receive benefit while earning anything for himself." This principle, which might be called the Principle of "All or Nothing," is ignored by the authors of *English Poor-Law Policy*, and we suspect is abandoned by them in their scheme of relief. We find no statement as to what policy is to be pursued with men who earn little but are not "unemployed"; but the inference

is inevitable that it is to be one of subsidies from the various Committees who will be inspecting his family. If so, then another Principle should have been added to those of 1907, the Principle of Partial Relief or the Subsidising of Wages.

We now come to the "Principles of 1907." The most important, the Principle of Curative Treatment, we have found to be inherited from 1834. There remain the Principles of "Universal Provision" and of "Compulsion." The attempt to introduce the first of these into the sphere of relief is perhaps the most daring of all the proposals before us. "What is most strikingly new since 1834 in the policy of the Central Authority is the Principle of Universal Provision—that is, the provision by the State of particular services for all who will accept them, irrespective of 'destitution' or inability to provide the services independently" (p. 267).

The first thing we have to say in respect to this Principle is that it has no place in English Poor-Law policy of the present day. It is only by juggling with the term "Central Authority," which in this connection should be confined to the Poor-Law Division of the Local Government Board, and using it to include the Education Department and the Municipal Authorities, that the Principle has been forced into the argument at all. Vaccination, sanitation, education, parks, museums, and libraries—these are the instances adduced, and none of them have anything to do with Poor Relief. (The administration of vaccination by the Guardians is a purely accidental connection.) It is true that our authors make a desperate, but futile, attempt to show that the Local Government Board in the person of its President was forty years ago converted to the Principle of Universal Provision. In expatiating upon its advantages, they say: "It is this consideration which justifies the provision of municipal hospitals, and which, presumably, led the Central Authority of 1870 (under Mr. Goschen) to dwell upon the expediency of 'free medicine' to the poorer classes generally, as distinguished from actual paupers, and perfect accessibility to medical advice at all times under thorough organisation" (p. 267). We find this passage quoted no less than four times (pp. 123, 207, 219, 267), but *always without reference to its context*, which points out the grave objections to such a system, and the danger that it would break down the provision of medical aid by means of benefit and friendly societies.

The second point is that the authors are either not clear themselves what they mean by "Universal Provision," or are purposely confusing the issue. Sometimes it would seem that they mean

merely that the State is to enter into business and provide services for those who would like to have them on payment; as, for instance, when they say on p. 295 that "the adoption of the Principle of Universal Provision does not imply or involve the gratuitousness of the service." In this sense the State would aim at being a Universal Provider on the same lines as Whiteley's, and the Principle is merely the Principle of Collectivism under a very thin disguise. But in other contexts it is quite clear that the provision is intended to be gratuitous; as in the argument (p. 267) that in providing services "indiscriminately for everyone who is ready to accept them, the State does nothing to diminish the inequality of condition between the thrifty and the unthrifty—for it is a simple axiom that the addition of equals to unequals produces unequals—whilst it raises the standard of living of all." Payment by the thrifty would of course vitiate this ingenious argument; though indeed it is equally fallacious whether the services are to be rendered gratuitously or not, for it ignores the obvious fact that the services must be paid for in taxation by somebody, and that somebody will presumably be the thrifty and not the unthrifty. So that the only way to avoid differentiation would be to make the unthrifty pay for them and let the thrifty taxpayer have them free.

In *this* sense, then, the Principle is nothing but the beginning of Communism under no disguise at all, and how far it is meant ultimately to go is indicated on p. 270: "Once this corporate responsibility" (for the "universal maintenance of a definite minimum of civilised life") "is accepted, it becomes a question whether the universal provision of any necessary common service is not the most advantageous method of fulfilling such responsibility—a method which has, at any rate, the advantage of leaving unimpaired the salutary inequality between the thrifty and the unthrifty." This means, we take it, nothing less than the gratuitous provision of all the necessities of life up to a definite minimum to all comers; and we do not think that the "thrifty" taxpayer will appreciate his share of the "salutary inequality," which means that he will pay both for himself and for the unthrifty.

With respect to the final Principle, that of "Compulsion," we need say little. There is no doubt that it has already been pushed much further, even in the sphere of Poor-Law policy, than could have been anticipated by the reformers of 1834. It is possible that it may with advantage be extended still further in dealing with certain classes of mental and bodily disease. But if personal

liberty is to be properly safeguarded, we shall have to go much more slowly in this direction than the Minority propose. We may turn against them here their own argument, which they maintain as against the Majority: "To compel, by law, able-bodied men and women to become paupers against their will; to force upon them a degrading status with the stigma of pauperism, when they do not even apply for public assistance, to compel them to come into an institution of the Destitution Authority when they ask only to be let alone, must, we think, in the absence of any judicial conviction of a specific offence against the law, be dismissed as politically out of the question." Strange to say, the Majority make no proposal for anything of the kind. It is the Minority which is going to instruct its Committees to give relief to a man's family whether he desires it or not, to "require" him thereupon to enter a Training Establishment, and if he refuses, to commit him to a Detention Colony. The Majority explain that they think such powers are unsuitable for a Public Assistance Authority, and that able-bodied persons guilty of carefully defined offences in the way of failure to maintain themselves and their families should be committed on a Justice's order to a Detention Colony under the Home Office.

So much for the two sets of Principles discovered or invented by the authors of *English Poor-Law Policy* and of the Minority Report. They resolve themselves into the Principles of Less Eligibility and Curative Treatment, both belonging equally to each period, but finding a different application under the different conditions of modern life; the Principle of National Uniformity, still an ideal to be aimed at, and recognised as such in the Minority Report; the Principle of Universal Provision, not yet recognised at all in the sphere of the Poor Law; and the Principle of Compulsion.

In the light of this analysis it is easy to meet the attack upon the Majority Report with which the book concludes. The accusation against it is that it abandons the Principles of 1834 and accepts those of 1907, and yet shows "a very definite trend backwards to the Principles of 1834 in a manner which seems to us calculated ingeniously to nullify the apparent repudiation, and in reality to leave the situation more confused than before." Our answer is that the confusion lies in the minds of those who have inverted the artificial antithesis between the two sets of Principles. The Majority Report nowhere either tacitly or explicitly abandons the Principles of 1834, when those Principles are properly interpreted and understood. As another instance of

misplaced ingenuity, we must quote the passage which is supposed to prove this abandonment: "Indeed, the Majority Report is in one place explicit in its repudiation of the 'Principles of 1834,' arguing that, whatever may have been their validity three-quarters of a century ago, they are no longer applicable even to the able-bodied" (p. 275). Now, what is the actual statement which finds this interpretation? "The administrators of the present Poor Law are in fact endeavouring to apply the rigid system of 1834 to a condition of affairs which it was never intended to meet. What is wanted is not to abolish the Poor Law, but to widen, strengthen, and humanise the Poor Law, so as to make it respond to a demand for a more considerate, elastic, and, so far as possible, curative treatment of the able-bodied." There is here, it will be seen, no word of the Principles of 1834, but only of the system by which the earlier administrators sought to apply their Principles. The confusion surely lies in our authors' repeated failure to distinguish between a Principle or policy and the various systems or methods by which it may be carried out. If we may take an analogy from another department of administration, we might as well say that Scotland Yard gave up the policy of identifying recidivists when it abandoned the system of photography for that of finger-prints, or that a doctor gives up the attempt to cure his patient when he considers the time has come to stop a course of medicine and try a change of diet.

The Principles of the Majority Report are those of 1834 developed and applied to the changed conditions of 1907, and with the addition of the Principle of Compulsion within carefully restricted limits. With the Principle of Universal Provision in the sphere of relief the Majority have nothing to do in one way or another; the provision they make is always for a definitely limited section of society, for those who cannot provide for themselves. The Minority also, as we have shown, cannot really get away from the Principles of 1834, though they make a great show of repudiation. But they can and do add their new Principle of Universal Provision, and whether that is a safe Principle upon which to administer relief we must leave it to our readers to judge.

HELEN BOSANQUET

THE TRANSFERENCE OF THE WORSTED INDUSTRY FROM NORFOLK TO THE WEST RIDING.

IT might perhaps have been expected that what is probably the classical case of industrial migration in English history, offering as it does questions of fact and problems of causation of the first interest, would have a literature of its own. Actually it has no recent literature worth mentioning. There are valuable incidental references—often in footnotes—in the general histories, especially in Dr. Cunningham's later editions; there are innumerable repetitions of familiar facts about water-power and coal in the text-books and economic geographies; and there are five rather inadequate pages by M. Laurent Dechesne.¹ The latest historian of "the industrial revolution," bound by the plan of his work to confine himself mainly to the eighteenth century, leaps in one sentence from Eden's *State of the Poor* to our own time, so missing the most vital part of the story²; and the economic section of the Victoria County History of Norfolk has not yet appeared. One has to go from Burnley's *History of Wool and Woolcombing* (1889), which does not deal directly with the problem at all, to James' *History of the Worsted Manufacture* (1857), which—though unsystematic—does deal with it, and is full of valuable material, and thence direct to the sources. No attempt has ever been made to discuss fully the forces that led to the decline of Norfolk. One is generally offered merely a sweeping and fatalistic reference to the geographical factor and a few suggestions of contributory causes. Even if, as a great economist once said to me, the history of "the" industrial revolution is a "thrice squeezed orange," there remains an astonishing amount of juice in it. Some of this juice I will try to extract.

The mere statistical data—such as they are—of Norfolk's decline have not been properly pieced together so far as I know. With these, therefore, I begin, to avoid the dangers of antedating or post-dating the effects of particular causes. The start-

¹ *L'Évolution Économique et Sociale de l'Industrie de la Laine en Angleterre*, 1900, p. 107-12.

² Mantoux, *La Révolution industrielle au 18^{me} Siècle*, 1906, p. 262.

ing points are Defoe's Tour and Arthur Young—neither unfortunately very satisfactory, but we must take what we can get. Defoe was at Norwich in 1723 and found trade very active, owing to the recent law prohibiting the use of printed calicoes. He was convinced by figures supplied to him by an "eminent weaver" that there were 120,000 people employed in the woollen [worsted] and silk and wool manufactures of that county only. (It should be noted that mixed fabrics of worsted and silk were among the chief products of East Anglia during the whole period under discussion.) Defoe's calculation was based on the number of looms in Norwich and the other towns and villages of central Norfolk.¹ It is very probably an exaggeration, and we have no means of knowing whether it includes, for instance, every child who span. Moreover, one must not treat the author of *The Plague of London* too seriously. Arthur Young, nearly fifty years later, is more precise²—and contradicts Defoe. He believed that the trade had increased fourfold since 1700. This is a mere assertion, but it implies at least growth during the memory of his informants. There were supposed to be 12,000 looms in the Norwich district, giving employment direct and indirect to 72,000 persons, of whom "more hands worked out of Norwich, for many miles around, than in it." Young takes a common local assumption that every loom employed first and last six people. If anything like the same assumption lies behind Defoe's figure, he and Young are in flagrant contradiction. Later writers were of opinion that the Norfolk industry was at its highest level of prosperity somewhere about Young's time, or perhaps a little earlier. The American and French wars did it much harm, so that in 1808 it was supposed that only some 8,000 looms were at work, when trade was "in a medium state"—although many more existed.³ Ten years later a more intelligent and trustworthy estimate puts the number of worsted looms in the Norwich district at 10,000.⁴ After another decade a foreign traveller marvels at the manufacture of bombazines, shawls, and crapes in and about Norwich. He gives a general impression of prosperity but no estimate of looms.⁵ Yet another ten years, and we come to the loom census taken for the Handloom Weavers' Commission in 1838. This deals only with the immediate neigh-

¹ Defoe's *Tour*, 1724, I, 92. The chief seats of the industry besides Norwich were Thetford, Diss, East Dereham, Attleborough, Harling and Walton. See the map and references in Mantoux, pp. 27-9.

² He visited Norwich in 1771. *Eastern Tour*, II, 74 sqq.

³ *The Norfolk Tour*, 6th edn. 1808, p. 97.

⁴ Rees' *Cyclopedia*, 1819, s.v. Worsted.

⁵ Meidinger, *Reisen durch Grossbritannien und Irland*, I, 204.

bourhood of Norwich, although the commissioners insert some figures—evidently not quite exhaustive—for the surrounding villages and towns. The figure for Norwich and its suburbs is 5,075 looms, of which 4,054 were employed. Not quite all of these were worsted looms—*i.e.*, looms producing worsted or silk and worsted fabrics. Two or three hundred were engaged on pure silk fabrics and about a hundred on sacking, woollen, and miscellaneous goods. Some six to seven hundred looms, of which about four hundred were employed, are reported as working for the Norwich trade in Wymondham, Horsham, and elsewhere. Several of the old centres—*e.g.*, Diss—have ceased to make worsteds altogether.¹

In 1841 we have the first serious attempt to register occupations in connection with the census. It is not very satisfactory, but again we must take what we can get.² About 4,600 men and women described themselves as weavers in Norfolk. Of these over 1,700 call themselves silk weavers; but these probably contain very many who, in previous estimates, would have been classed with the "worsted" industry. Many hundreds out of the 4,600 would be linen, sailcloth, sacking weavers, and the like. We cannot safely connect more than, say, 3,500 with the old staple industry. It is noticeable that hardly any of the male weavers were young, *i.e.*, under twenty; and probably very many of them had not regular work.

Such as they are, these figures of looms and weavers show a marked decline only from 1818 onwards. Nor is there reason to suppose that the decline became rapid until after 1830. In 1828 Meidinger, as we have seen, gives the impression that the old trade of Norwich was still pretty active. Certainly the city grew fast up to 1831, whereas from 1831 to 1841 it hardly grew at all.³ Everything points to this as the really destructive decade for the weaving and finishing industries. Earlier decades had seen only stagnation or some slight measure of decay, although even stagnation involved declining importance in view of the rapid growth of the Yorkshire industry. With spinning it was different; the absolute decline came earlier. Hand-spinning had dwindled into insignificance by the 'twenties.⁴ Between 1838 and 1842

¹ Handloom Weavers' Commission. Assistant Commissioner's Reports. Part II. 309, 328 *sqq.*

² Census of 1841. Occupation Abstract, published in 1844.

³ The population of Norwich and its adjacent hamlets was: 1801, 36,800; 1811, 37,800; 1821, 50,288; 1831, 61,364; 1841, 62,294.

⁴ Rees' *Cyclopædia* as above. See also *A general history of Norfolk, intended to convey all the information of a Norfolk tour*. Printed by and for J. Stacy, 1829, p. xciii—"the process of manual combing and spinning is nearly superseded,"

four power spinning mills were started in and about Norwich¹; but they were too late to turn the tide. There was never any prospect of general recovery after about 1845, either in spinning or weaving, although as late as 1901 there were still said to be 129 persons connected with the worsted manufacture in Norfolk.

Before dealing with the geographical factor, it will be well to look at the organisation and relative strength of the Norfolk and West Riding industries just before the days of spinning machinery and power. Norfolk was, at that time, prosperous and highly organised, but in a state of somewhat unstable equilibrium. At the head of the industry stood a small group of merchant manufacturers—the sort of people who wore swords, and when they wished to revive their trade sent their sons to be educated in Germany, Italy, and Spain.² Mere manufacturers were apparently not numerous, but men of small capital had openings as wool staplers, stuff pressers, comb makers, master dyers, and master combers. There was no factory system, but some of the dyeing establishments must have been on a large scale, especially that of Michael Stark, who dyed bombazines from Kidderminster and Yorkshire, besides all those made in Norfolk, not to mention other classes of goods.³ An interesting group connected with the Norwich trade and the worsted trade generally were the master combers. The ordinary domestic spinner did not carry on the delicate task of combing. She had to receive the combed “tops” from a specialist. So throughout the eighteenth century we find combing carried on all over the country. The masters were men of moderate substance; the journeymen supplied some of the earliest trade unionists.⁴ During the period 1760-1790 the master buys wool, gets it combed in his own workshop and spun in the cottages, then sells his yarn to the yarn dealer or the manufacturer. Possibly the master comber who lived in a manufacturing district sometimes worked the manufacturer’s own wool on commission; but this is a point on which I have not as yet found conclusive evidence.⁵

¹ Blyth, *The Norwich Guide and Directory*, 1842, p. 62. See below, p. 206.

² Stacy, p. xc. Refers to the period before the great wars. *The Norfolk Tour* (1808, p. 91) says—“the whole trade is conducted by a few houses, who command large capitals, and who add to the sagacity of the merchant the skill of the manufacturer.” In 1791 there were about thirty of these houses. Evidence of William Stark, Handloom Weavers’ Commission, as above, II, 301 *sqq.* See also Mantoux, p. 46, and authorities cited.

³ This was the father of William Stark, the witness of 1838.

⁴ There is abundant evidence relating to the combers’ unions in the Webb MSS, and elsewhere.

⁵ For the Norfolk master comber c. 1780, see Mantoux, p. 46; for the Yorkshire master c. 1760, my article in this journal, XVI, 517; for the worsted dealers,

There can, I think, be no doubt as to the part played by these master combers in connection with that import of yarn from other countries, which was one of the dangerous aspects of the Norwich industry. Norfolk wool was never combed in the eighteenth century; it was too short. It mostly went to Yorkshire to be made into woollen cloth.¹ Defoe found the Norwich men buying Lincoln long wool fleeces at Stourbridge Fair in 1723, and was told that they also imported "many thousand packs of yarn" from counties so far afield as Yorkshire and Westmorland.² How long this localised division of labour had been going on it is not at present my business to inquire; but it is probable, from the very nature of the worsted processes and the known facts of forty years later, that the yarn-selling master comber had existed for some time in every district from which Norwich drew her supplies early in the eighteenth century.³ As the century went on, she added to the number of those districts. The 1769 edition of Defoe mentions Dublin besides Yorkshire and Westmorland, and a nineteenth-century historian adds Scotland.⁴

The danger of this system for Norwich is obvious. I am strongly inclined to connect with it the rise of the worsted industry in the West Riding. That industry comes to light, in a district which had long been known for its woollens, about the year 1700. The existence of the yarn export must have been a standing challenge to men of enterprise to make experiments with the manufacture. Apparently, as one would expect, the experimenters were people of means—merchants perhaps or master combers—for in the eighteenth century the Bradford worsted industry was more capitalistic than the woollen industry of the neighbouring districts.⁵ There were three main types of fabrics in the production of which it was possible to compete with Norfolk—the plain stout worsteds, of which the camlet, used for rain cloaks before the days of Mr. Macintosh, and the shalloon, worn by "the lower classes of females," were representatives; the fancy worsteds, called by many strange and now obsolete names, used for the dresses of well-to-do women, for

James, p. 254. The trade is still represented in nearly every county of England in the 1841 census. It was largely concerned with worsted for knitting.

¹ Young, *Eastern Tour*, II, 74.

² *Tour*, I, 91, 128.

³ Dr. Cunningham (II, 510) has noted the existence of "market spinners" who "sett many spinners on work" in the west of England as early as 1638. In the worsted trade such dealers would probably spring from among the combers.

⁴ Defoe (1769), I, 56. Stacy, xci.

⁵ Mantoux, p. 45, following Dechesne, p. 68-9, following James, p. 325. Both Mantoux and Dechesne build a little too much superstructure on James' facts.

upholstery, and other purposes; and the silk and worsted fabrics, chief among which was the bombazine of our great-grandmothers. Yorkshire naturally began her competition at the bottom of the scale—exactly when we do not know. There is clear evidence from the year 1741 that she had got hold of a large trade in plain worsteds.¹ As the commerce of England was expanding rapidly, there is no reason to assume that this was actually taken from Norfolk, though of course it curtailed Norfolk's potential markets. Coventry, Kidderminster,² and some other of the old worsted centres seem to have suffered rather than Norwich, which was in a position to devote itself to the finer branches of the manufacture. But 1741 was only the beginning of Yorkshire's competition. In the next thirty years she made rapid progress; her goods supplied the greater part of the home market and were exported; she began to experiment with the finer, though not the finest, articles; and it has been plausibly argued, from rough contemporary data, that "the value of the stuffs made in the West Riding equalled those made in Norwich and the surrounding districts in 1772."³ Yet Young's evidence shows that this did not prevent a coincident expansion in the trade of Norwich.

This is all long before machinery and power touched the industry. True, the flying shuttle was invented in 1738, and adopted earlier in Yorkshire than elsewhere; but I do not think that its adoption was very rapid during the first thirty years in the worsted trade.⁴ The most obvious advantage of the invention was in broadcloth weaving, and worsteds were all narrow—the camlet, for instance, being thirty inches wide.⁵ Dr. Cunningham has suggested that hilly districts gained at the expense of East Anglia, during this period, because they were better suited for the erection of fulling mills.⁶ This may be true enough so far as the woollen cloth trade is concerned; but Norfolk made very little woollen cloth. Its staple goods—worsted and mixed fabrics—were not fullled at all.⁷

¹ James, p. 231.

² See Rees' *Cyclopædia*, and the article on Coventry in this Journal, XVII, 350.

³ James, p. 235.

⁴ In 1803 nine-tenths of the Yorkshire worsted-weavers are said to have used it—evidence of N. Murgatroyd of Bradford in connection with the Clothiers' Petitions of 1803. But, according to James, the weavers as a class only reconciled themselves to it after the introduction of the more uniform mill yarn for weft. This was later than 1772.

⁵ So Wm. Stark describes it in 1838. Broad worsteds are rare to this day.

⁶ II, 500.

⁷ Some worsteds are slightly fullled to-day. But this is a nineteenth-century innovation. Mixed fabrics of wool and silk have never been fullled.

There is not, I believe, any reason to seek novel causes explanatory of the first rise of Yorkshire. It is the ordinary case of a pushing, hard-working locality, with certain slight advantages, attacking the lower grades of an expanding industry. Meanwhile Norfolk was well employed in the higher branches of the industry, which were also growing, thanks to the increase of wealth and foreign trade. Among the advantages of Yorkshire were nearness to raw material supplies and the absence of that corporate conservatism which is often found among the workers in an established *industrie de luxe*. We may feel fairly confident too that labour was cheaper about Bradford than in Norwich before 1770; but we have no wage figures of any significance for the early eighteenth century. And when we do get such figures, in the later eighteenth and early nineteenth centuries, the argument from wages to cost of production and from cost of production to industrial migration is particularly risky. For instance, arguments have been based on the fact that in 1790 "a weaver" at Norwich is said to have made 11s. and at Bradford 10s. a week; but we are not told what they were weaving or how fast they worked. A large proportion of the Norwich weavers were employed, and well employed, in 1790 on high-class work; those of Bradford were mostly turning out plainer fabrics. Naturally the former would earn more. It is for reasons of this kind that I shall make no attempt to analyse our very scanty supply of wage statistics. Even for the 'thirties of the nineteenth century such figures as we have are endlessly difficult of interpretation.¹

The "import" of yarn and—partly in consequence of this import—the growing competition of Yorkshire in the lower grades of the industry were, then, tending to make the Norwich trade somewhat unstable, though they had not prevented its growth. A third cause of instability was the competition of the cotton industry in the home market. Printed cottons were becoming more popular and more common throughout the century—in spite of the Act of 1721—but it was not until after 1770, or even 1780, that their competition with the fancy fabrics of the Norwich looms became really dangerous.²

More serious, before the days of power, than the competition of cotton was the fact that Norwich was to so large an extent a

¹ For some discussion of wages, see Dechesne, p. 108 *sqq.* Mantoux, p. 260. Dechesne is able to show that from 1823 to 1833 combers were paid less per week at Bradford than at Leicester. The significance of this fact in connection with the migration of the industry is not great; for the industry remains at Leicester.

² Blyth, p. 59.

producer of luxuries for uncertain and easily closed markets. In 1771 Arthur Young valued her total annual output at £1,200,000. Of this he reckoned that £480,000 worth went to Rotterdam for the North European markets. Another large slice—mainly camlets and bombazines—went to London for the China trade of the East India Company. Besides all this, Spanish ladies affected Norwich bombazines; Spanish and Italian monks and clergy wore Norwich camlets. South America and North America were important purchasers, while Russia bought wonderful “striped Calimancoes,” “used by the Tartars and other Siberian tribes for sashes.”¹

The American War of Independence did much damage, and the competition of cottons in the home market after about 1775 rendered such injuries to the foreign trade doubly disquieting; but Norwich recovered, and the years from the Peace of 1783 to the outbreak of the great French war were a time of remarkable enterprise and success in opening out fresh markets abroad. Norwich travellers—so wrote a local historian—“were seen in every kingdom in Europe, and the great fairs of Frankfort, Leipsic, and Salerno were crowded with purchasers for Norwich goods. The tastes of every country and the habits of every clime were consulted.”² All British manufacturers suffered during the great wars, but none more than those of Norfolk—just because of their dependence on foreign purchasers and on the existence of a brisk demand for luxuries. The trade to Northern Europe, wrote William Stark, in 1838, “continued uninterrupted until Buonaparte made his excursions on the Continent of Europe; since which time no orders have been regularly sent, either from Germany, Holland, or Russia.” Fortunately, there remained the steady—perhaps somewhat dangerously steady—demand of John Company, who bought his camlets and his bombazines in uniform and respectable quantities from his eminently respectable Norfolk correspondents.³

I come back to the geographical factor. Although I do not believe that it led by fatal necessity to the extinction of the Norfolk industry, yet its importance remains great. But for it the industry could hardly have left Norfolk altogether; although the West Riding might have gained still further at her expense, had Yorkshire water and Yorkshire coal and Yorkshire iron

¹ Stark's narrative and Blyth, p. 59.

² Stacy, p. xc.

³ Stark and Blyth, as above. The company would buy as many as 20,000—24,000 pieces yearly when trade was good. The captains of East Indiamen also took out camlets on their own account.

never come into play. It is just possible that we should add Yorkshire climate to the list, but I hesitate to do so. Humidity does facilitate fine worsted spinning; but Norwich has a rainfall heavier than that of Leeds and not much less than that of Bradford.¹ Also, the city lies low, with moist meadows and broads not far away. The climatic factor, then, can be neglected. Nor should too much importance be attached to the question of water. Water-power no doubt is lacking in East Anglia, but this is relatively unimportant, for what one might call the water period in the West Riding was short. The first Yorkshire worsted mill—water-driven—was built at Addingham on the Wharfe in 1787. About thirteen years later came the first steam mill at Bradford.²

Geography alone does not explain the fact that it was more than a generation before the first mill engine was set going in Norwich.³ Had the Norfolk men been able and willing to experiment with steam early in the century, I see no reason why their superior skill, experience, and reputation in weaving, dyeing, and finishing should not have counterbalanced for many years, if not indefinitely, the inferiority of their geographical position. After all, that inferiority was not crushing so far as power was concerned. The Yarmouth sailors took an active part in the collier coasting trade from the Tyne to the Thames in the eighteenth century,⁴ and 20-ton barges could get from Yarmouth to Norwich without locking in 1828, though the mouth of the Yare was difficult to make.⁵ The price of coal would be higher than in Yorkshire, yet not prohibitive. More serious was the lack of iron, whereby Norfolk was robbed of that close interaction between the textile and engineering trades to which the coalfield manufacturing districts owe so much. Yet if Norfolk had taken full advantage of her opportunities she might conceivably have tided over that period, in the early and mid-nineteenth century, in which location was all-important—diminished but not extinguished. That she did not do so was her fault, though also, and probably to a greater degree, her misfortune. One more factor in the problem—the personal factor—must therefore be isolated before we can see how all the factors combined in the nineteenth century to bring about the ultimate collapse.

¹ Norwich, 27-53; Leeds, 25-11; Bradford, 29-11. The spinning district about Leicester is drier than the Norwich neighbourhood.

² James, 327, 591.

³ The engine, of 100 h.p., started on July 17, 1838. Blyth, p. 46.

⁴ Defoe (I, 193) says they had a greater share in it than any other town in his time. A century later coal and timber were their chief imports.

⁵ Meidinger, p. 203-205.

It is as easy as it is unphilosophical to bring railing accusations against whole communities, attributing economic decline to wholesale moral degeneration; but the evidence of Norwich men and Mr. and Mrs. Webb's recent study of the public life of the city¹ justify strong speaking and help to explain why it was so unsuitable a home for some sorts of industrial enterprise between 1800 and 1835.

In 1838 William Stark attributed the failure to keep pace with Yorkshire in the matter of machinery to "the existence of a violent and odiously virulent party spirit. . . . No man of either political party . . . could introduce machinery into this city . . . but he would in all probability, at some paltry election contest (particularly if he took an active part in it), be held up as an obnoxious individual . . . and his property and perhaps his life endangered thereby . . ."² Wage reductions were equally dangerous to the manufacturers. The weavers always fought hard for their scale of piece wages, "either agreed upon by the weavers and manufacturers together, or arranged by the weavers and submitted to the manufacturers";³ but as time went on wage reduction or machinery became inevitable alternatives. Vitriol-throwing, window-breaking, and violent picketing were of common occurrence, as was not surprising in a city where "incessant elections" produced a "demoralising pandemonium of bribery and treating, intimidation, and personal violence." "From top to bottom the whole administration was dominated by party considerations in their lowest form." It was your party that secured for you outdoor relief or a place in the workhouse, privileges refused to members of the other side. The spoils system was worked systematically from 1818 to 1835. City uniforms were made by "orange and purple" or "blue and white" tailors, according to the turn of the elections. "The party to which every man in Norwich belonged, from the highest to the lowest, was as well known as if he daily wore clothes of the colour by which it was designated."⁴ The very boys of the city had mock elections, with bribes of marbles, coppers, and even shillings, with a dinner and a ball to celebrate victory.⁵ "Every rogue," said an alderman, "is either blue or purple, and his party make it a point of honour to bring him off if possible." Perhaps it is no accident that,

¹ Sidney and Beatrice Webb, *English Local Government, The Manor and the Borough*, 1908, p. 529-57.

² Stark's narrative, as above.

³ Dr. Mitchell's Report, in the same volume as Stark's narrative, p. 311.

⁴ Dr. Mitchell's Report, p. 342. The other quotations are from Mr. and Mrs. Webb.

⁵ Evidence of Mr. Etheridge, a manufacturer, in Dr. Mitchell's Report.

although the Norwich Yarn Company was formed in 1833, the foundation-stone of the New Yarn Factory was not laid until 1836¹—after the Municipal Reform Act. Presumably its promoters, as Stark put it, feared to be “held up to odium at some paltry election contest.” The last feat of the dying, unreformed corporation had been to vote “that the whole of the balance that might be in the Chamberlain’s hands on the last day should be lent for seven years, free of interest, to a local manufacturing firm, in order to leave their successors in office without a farthing.”² Several mills could have been equipped and many industrial experiments made from the funds spent in bribery during the last thirty years of the old order. There was clearly no lack of free capital.

Of course, the West Riding was violent, very violent, and likely enough corrupt, but hardly with the violence and corruption of Norwich. Its scattered weavers and rising manufacturers may not have been better men than their fellows in Norfolk, but they certainly had fewer temptations and fewer distractions. Demoralisation in Norwich was more concentrated, as in some Greek or mediæval city in decay. But a man may be corrupt and enterprising, turbulent and drunken yet highly skilled. Though there was an increase of party violence and corruption in the nineteenth century, both existed in 1770–1790, when the industry of Norwich was undoubtedly prosperous; in short, we must not overrate the significance of the personal and moral factor. I believe that it helped to retard experiments with machinery, but it was by no means the sole retarding force. We come to the working together of all the factors during the first thirty or forty years of the nineteenth century.

It was certainly not the fault of the East Anglians that the opening years of the new century found their trade partially crippled by the “excursions of Buonaparte.” Nor was it their fault that the organisation of the industry in the eighteenth century had put the manufacturers out of touch with spinning and spinners. For some reason, as yet obscure to me, the Eastern Counties had always been slow to adopt improved methods in spinning. They are said not to have adopted the wheel, but to have been still using the distaff, in 1780; and this is borne out by the fact that in Norfolk itself—but in Norfolk only—the distaff was still in use in 1818.³ Hence the heavy “import” from

¹ Blyth, p. 41–4.

² Webb, p. 555.

³ Cunningham, II, 502, for 1780, quoting an anonymous pamphlet. Rees’ *Cyclopædia* for 1818.

counties near and far. And even had every spinner in Norfolk used the wheel, they could only have spun a tithe of the yarn required. Norwich was a yarn buyer. It mattered very little to her manufacturers who made the yarn or how it was made. The master combers and their men might suffer if spinning in Norfolk declined, but they were not the leaders of the industry. One can trace no note of regret in the business-like record of the local guide-book writer in 1808. "The machines that have lately been invented in Yorkshire seem to threaten the destruction of the combing and spinning as now practised in Norfolk and Suffolk, for besides their making yarn of a more even and finer quality . . . it comes cheaper to market."¹ It was not because Norwich lay far from the coalfields that she did not try steam-power as soon as it became available, but because power was first applied to spinning, and she was not really an important spinning centre. London flour mills bought some of Watt's first engines, and there is no coal in Middlesex.

Nor can the slowness of Norwich to adopt the flying shuttle be attributed altogether to the—very real and disastrous—conservatism of her weavers and timidity of her manufacturers. Fine fabrics were their speciality; and the finer the goods, the less important is labour-saving machinery. In 1818 Norfolk was still "the only part of England where any considerable quantity of the finest stuffs and bombazine" were made²; and in some sorts of fine weaving (silk weaving, it is true, and not in Norfolk) we hear of masters deliberately discouraging the fly-shuttle on the ground that it led to unsound work.³ When it became general in the Eastern Counties I have not been able to ascertain; but so late as 1838, in an account of a particularly well-managed Norwich factory, it is specially mentioned that the fly-shuttle was used as if this were a fact deserving of praise.⁴ Whether the reasons for delay were sufficient or not, it is clear that all along the line the adoption of new or improved machines at Norwich was very slow. "The fact is," said a retired manufacturer in 1824, "that in Norwich itself we have very little machinery, but we have some, and what we have is eminently useful to us."⁵ It is not surprising to learn that some years before this confession "by far the greater part" of the yarn used was machine-spun in Yorkshire, Lancashire, and Durham.⁶

¹ *The Norfolk Tour*, p. 98.

² Rees.

³ Dr. Mitchell's Report on Coggeshall, Essex, p. 290.

⁴ *Ibid.*, p. 318.

⁵ Report of the Committee on Artisans and Machinery, p. 155.

⁶ Rees.

Though so little was done in the way of adopting machines, real enterprise was shown in the years that followed the war in devising new fabrics to suit the changing habits of consumers. William Stark gives a long list—Norwich crape, *crêpe de Lyon*, *poplin Français*, silk and worsted brilliant, Irish poplin, and what you will. But the sort-lived successes with these were more than counterbalanced by the decline in the East Indian demand. So long as the Company enjoyed its exclusive privileges Norwich was safe. Up to 1793 private trade was illegal. From 1793 to 1813 it was only possible under onerous conditions. But in 1813 the Company lost its monopoly of the Indian market. In 1833 the China market was also thrown open. The private trader deserted the gentlemanly traditions of the Company and bought camlets and bombazines where they were cheapest, that is, in Yorkshire. Of course, Norwich said they were cheap and nasty; possibly some of them were.¹ Yet even the Company in the later years of its monopoly partially deserted Norfolk, for in 1823 we find James Ackroyd and Co. of Halifax making camlets to its order.²

The Yorkshire men were not content with pirating the Eastern trade. They fell to imitating the new fabrics with which Norfolk tried to keep its place at the head of the British industry and to perfecting their appliances for finishing stuffs. For a time, between 1815 and 1835, large quantities of the finer Yorkshire materials were sent across England to be dyed and finished—but that also ceased. Then came the development of the new trade in worsteds with cotton warps, in which the West Riding gained by its nearness to Lancashire.³

The circumstances which eventually led to the movement for starting yarn mills in Norfolk are of great interest. In the eighteenth century, as I have said, the Norfolk wool—of the South Down strain—was too short for use in the worsted trade. But round about 1820 improvements in machinery led to the use of shorter and shorter wool for combing; while at the same time the Norfolk flocks were being crossed with long-woolled Lincolns and Leicesters.⁴ The situation of the eighteenth century was reversed, and "the long wool of Norfolk was bought up by the Yorkshire manufacturers and made into worsted yarn."⁵ It

¹ Dr. Mitchell's Report, p. 302, 306, 308.

² James, p. 389.

³ James, p. 471 *sqq.* Dr. Mitchell's Report, p. 313. According to James "Orleans cloth," with cotton warp and worsted weft, was invented in 1826.

⁴ Evidence of R. Jowitt, Leeds wool stapler, before the House of Lords Committee on the Wool Trade, 1828, p. 127.

⁵ Dr. Mitchell's Report, p. 335. Statement by Mr. Blake, manager of the Yarn Factory.

was then sent back to its native county. The continuance of this state of things was so obviously a confession of inferiority that in 1833 the Company was founded which five years later started its 100-h.p. steam engine. It gave employment to between 600 and 700 hands. A mohair mill followed, and then two others—all before 1842. But there were already nearly 150 mills in Bradford alone, and between twenty-five and thirty in Leicester, which was throwing itself with more vigour into the business of spinning worsted by machinery than any town outside Yorkshire.¹

Meanwhile the power loom was gaining a footing in the worsted districts. With its advent set in the destructive period for the Norwich weaving industry. It was first tried in Yorkshire in the early 'twenties, and of course it led to riots. By 1838 it was widely, though very far from universally, used there. The famous Black Dike Mills, for example, adopted it in 1836. Two years later we hear for the first time of power looms at Norwich. The commissioners of '38 found a few in one of the mills.² So in this matter Norfolk was about fifteen years behind Yorkshire—a fatal delay which I should attribute almost entirely to the personal factor. She had already experimented, but in very half-hearted fashion, with the Jacquard loom for fancy weaving. These experiments began about 1833. Eight years later the local historian wrote: "The number of cards makes the employment of these looms very expensive, and the demand for them has nearly ceased."³ This might not have been surprising had all the weaving still been done in the cottages; but it was not. The Commissioners in 1838 found a number of weaving sheds full of hand-looms in the higher branches of the trade. Besides twenty "shops" with from six to twelve looms each, there were eight with from fourteen to thirty; one with forty; one with forty-seven; one with fifty-one; and one with no less than one hundred and forty-nine. Some of their owners, one would think, might have persisted in experimental use of the loom which is now almost universally employed in all the most complicated weaving.

"It is to be hoped," writes Blyth in 1842, "that now that yarn mills are established . . . and that the masters have introduced the power loom . . . that trade will revive." But there was a terrible deal of lee-way to make up. The pulse of trade

¹ James, 487, 607.

² Dr. Mitchell's Report, p. 335. They were in the mohair factory.

³ Blyth, p. 60. The Jacquard was invented at Lyons about 1805. The control of the warp threads is exercised by perforated cards that pass over pegs connected with the lifting mechanism.

in Norwich had so long been beating slow that venturesome spirits had turned their eyes North; the migrations which have introduced so much Norfolk blood into the population of Bradford had begun. To take a single conspicuous case. In 1836 W. E. Forster was apprenticed to Mr. Robberds of Norwich, head of one of the old firms, a maker of handloom camlets for the Eastern market. In 1839 he got sick of the slow, respectable business, and went to the Pease's worsted mill in Darlington; thence to Bradford, where he set up in business with T. S. Fison, himself the son of a Norwich wool stapler.¹

By this time the importance of what might be called the engineering factor, which is only an aspect of the geographical factor, was apparent. Most textile machinery up to about the year 1820 had been made of wood with metal fittings only.² Gradually iron and steel became the materials for the frames and looms and combs of the North. One after another decisive inventions like that of the cap spindle (1831), the screw gill (1834), and then the various machine combs were made or adopted in a neighbourhood where textile specialist and mechanical engineer, working mainly in metal, could play into one another's hands.³ The case of combing is the most important. Cartwright had invented a comb in the eighteenth century, but it had never been a very great practical success. "It could be used with good results upon certain classes of wool, but failed in the manipulation of the finer qualities"; so that during the first forty years of the nineteenth century "the hand-comber held the position of being able to produce better combings than any machine that had been invented,"⁴ for the use of the fine Australian wool in the worsted industry was increasing rapidly. The decisive combing inventions were made at Bradford in the 'forties by Lister, Donisthorpe, and Holden.

Not only was the comb perfected, but great firms sprang into existence to do combing on commission. This, I believe, was the finally decisive factor in the transference of the industry. Norfolk had just brought herself after years of delay to give machinery a fair trial. But there were three hundred adult hand-combers out of a working staff of six to seven hundred in her first yarn mill. Now, this indispensable preliminary process also was taken over by

¹ Wemyss Reid, *Life of W. E. Forster*, p. 76, 97, 137.

² The general significance of this transition is well brought out in Sombart's *Moderne Capitalismus*.

³ See Priestman, *Principles of Worsted Spinning*, p. 23. The cap spindle was an American invention.

⁴ Burnley, p. 127, 144.

machinery. The new machines were very expensive, yet every spinning mill that aspired to provide cheap yarn for the finer branches of the trade—and this was the very *raison d'être* of the Norfolk mills—must buy them or be within reach of the commission combers. It became harder than ever for the counties that had fallen behind in the race to regain their lost ground. Everything that a spinner could want was to be found in Yorkshire—power, subsidiary industries, a wide market for yarns, an efficient working population. There were no subsidiary industries in Norwich; the population had no long experience of machinery; the market for yarns was not wide—for it was to Yorkshire that the foreign buyer, who had become an important element of demand since 1825, naturally looked; and no one in England but a Norwich man would think of buying Norwich yarn.

The statistics of worsted machinery in 1850, collected by the factory inspectors, will serve to illuminate the situation just described. There were in England nearly 850,000 spindles and 32,600 power looms. (For combs there are unfortunately no figures at this date.) Of the spindles 746,000 and of the looms 30,850 were in Yorkshire. Leicestershire came second on the spindle list with 27,500, Norfolk third with 19,216. On the loom list Lancashire was second with 842, Norfolk third with 428. In 1856 the Norfolk spindles were slightly more numerous than in 1850, the Norfolk power looms rather fewer.¹ I may add that the machinery returns of 1904 assigned 5,000 spindles to Norfolk, but I believe that they are no longer at work. There is no need to give even a glance at the intervening half-century. The transference of the industry was really complete in or about 1850.

J. H. CLAPHAM

¹ James, p. 510.

THE GERMAN BANK COMMISSION, 1908-9.

ACCORDING to the German Bank Act of March 14th, 1875, the Charter of the Imperial Bank has to be renewed at intervals of ten years from January 1st, 1891, and the four still existing private banks of issue can have this right withdrawn from them at one year's notice at the end of any of these periods. It became necessary, therefore, as early as 1909, to regulate the position of the Imperial Bank and the other banks which issue notes, for the decade beginning 1911. The crisis of 1907 had, moreover, made the banking question one of unusual interest, and it was more especially the discount policy of the Imperial Bank, which had at times raised its rate as high as $8\frac{1}{2}$ per cent., which was made the subject of very severe criticism. Hence the Imperial Government decided to prepare the ground for the new law by an inquiry, which should subject all the questions of banking then under discussion to the closest scrutiny. The inquiry was carried on, under the chairmanship of Herr Havenstein, the President of the Imperial Bank, by a Commission consisting of twenty-three members, which in May, 1908, examined a large number of experts in every branch of economics and business, and in October of the same year formulated its own views on the most important points. It met again, after the Bank Act of June 1st, 1909, had come into force, in November of the same year, in order to express an opinion on the special question of the security and liquidity of the deposits.

At the inaugural meeting of the Commission on May 1st, 1908, Wermouth, the Under-Secretary of State, in the capacity of representative of the Imperial Government, explained that the preservation of the gold standard and the maintenance of the Imperial Bank in its present constitution were the pillars of the existing economic order, and, in the opinion of the Imperial Chancellor, should remain outside any discussion. This at the outset disposed of the idea, supported by some members, of nationalising the Imperial Bank. The Bank will therefore retain its peculiarly mixed character: its capital is exclusively private, its administration entirely a national affair. All its officials are

Government employees ; the supervision of the Bank is carried on by a Board, which consists of the Imperial Chancellor as Chief and four members ; the direction of affairs is in the hands of a directorate, the president and members of which are proposed by the Federal Council and nominated for life by the Emperor. The shareholders are represented by the General Assembly, whose powers are very limited. It elects the Central Committee, which exercises a constant influence over the financial business, even though in the majority of circumstances its opinion only is asked, its consent being indispensable in a very few cases only.

Nothing, then, was to be changed in the way of organisation. But a suggestion emanated from various quarters that it might be desirable to increase the Bank's own means by augmenting its own capital or even its Reserve Fund, and this was the first question discussed by the Commission. The capital of the Bank amounted, according to the law of 1899, to 180,000,000 marks, and the Reserve Fund was fixed at one-third of this sum. Owing to the premium earned by the increase of the capital, it was raised even higher, *i.e.*, to 64,814,000 marks, and hence has not increased again since 1906. The majority of the experts did not recommend any increase of the original capital of the Bank, for they held, and justly so, that this would not ensure a lasting increase of gold. It must also be taken into account that the capital of the Imperial Bank is not, like that of the Bank of England or the Banque de France, in great part vested in non-liquid claims on the State. No objection was raised, however, to an increase of the Reserve Fund, and this was therefore reopened by the Act of June 1st, 1909, without any maximum limit being assigned. At the same time a new apportionment of the profits between the State and the shareholders was made : the latter obtain in the first instance a $3\frac{1}{2}$ per cent. dividend, and of the surplus 70 per cent. is assigned to the State, 20 per cent. to the shareholders, and 10 per cent. to the Reserve Fund. In the last years the share of the State has amounted to 75 per cent., that of the shareholders to 25 per cent., and the former amounted in the very profitable year of 1907 to 34·5 million marks, while the shareholders received a total dividend of 9·89 per cent., that is, 17·5 million marks.

A further important question concerned the raising of the duty-free issue of notes of the Imperial Bank. It is a matter of common knowledge that the sum total of notes, not covered by specie, which the Imperial Bank is allowed to issue is not absolutely fixed, as is the case with the Bank of England, but a so-called "contingent" of uncovered notes is allowed, and excess

over which is admissible on payment of a duty of $\frac{5}{48}$ per cent. of this excess as shown by the quarter-monthly returns. This arrangement was attacked by some experts, who made it responsible for the high rate of discount, and were, moreover, of the opinion that uneasiness at home and distrust abroad would be aroused if the Bank overstepped the duty boundary to any considerable extent. They held that the raising of the contingent was superfluous, and that the limitation of issue was ensured by the provision, also contained in the Bank Act, that a third of the issue must always be covered by specie or bullion.

As a matter of fact, the discount rate of the Imperial Bank is not in any way influenced by a consideration of the duty which she has to pay. She has often kept to a rate of 4, $3\frac{1}{2}$, and even 3 per cent. when she was herself obliged to pay at the rate of 5 per cent. per annum on her newly issued notes. This always happened when there was an unusually great demand for currency, which was obviously not likely to be of long duration, while the general conditions of credit throughout the country remained normal and no drain of gold was anticipated. A scarcity of currency is, however, a much more frequent and serious occurrence in Germany, where the cheque system is not yet fully developed, than in England. This is especially noticeable at the end of the quarters, when unusually large payments have to be made in various directions, which do, indeed, clear themselves up in a few days, but nevertheless produce an extraordinary demand for gold and notes for a short time. But in these circumstances the Bank raises its discount rate, even after the duty-free limit has been overstepped, only if a serious extension of credit coincides with the danger of an unfavourable state of the foreign exchanges. Hence in the inquiry it was recognised that the coming into force of the duty often served as a useful danger signal, when a check was required for an expansion of commercial affairs combined with an inflation of credit. On the other hand, it was admitted that a frequent and considerable overstepping of the duty-free limit made a very bad impression. Thus, in the year 1907, this happened no less than twenty-five times, and at the end of that year the issue of notes not covered by specie had risen to 625,974,363 marks over and above the duty-free contingent.

The Act of 1909 took a medium course in this question. The duty-free contingent of the Imperial Bank, hitherto fixed at 472,829,000 marks, is now raised to 550,000,000 marks, and it is besides decreed that at the end of the months of March, June,

September, and December an additional 200,000,000 M. may be issued. The contingents of the four private banks of issue, amounting to a total of 68,771,000 marks, remained unaltered. We must, however, remember that the provision for covering the issue of notes includes not only the supply of gold and silver, but also of Treasury notes (the total of which, however, amounts to only 120,000,000 marks) and the notes of other banks.

The third important question concerned the means which the Imperial Bank should use to stimulate the importation of gold from abroad and to counteract the flow of gold out of the country. The gold supply of Germany is indeed estimated at more than 4,000,000,000 M. by the Director of the American Mint, but as a matter of fact probably falls short of this figure by several hundred millions. An investigation made in 1908, in connection with the inquiry, brought to light the fact that the use of bullion for industrial purposes was much greater than had been supposed. It was ascertained to amount to 87.7 million marks per annum, and that at least one-half of this quantity of metal was obtained by melting down German gold coins. There is more gold in general use than in England, but the amount in the Imperial Bank has seldom risen above 800,000,000 M. during the last ten years, while it has on several occasions fallen below 500,000,000 M. In addition to gold, the Bank does indeed possess a considerable stock of silver coins, *i.e.*, 200,000,000 to 250,000,000 marks. This, however, since the calling in of the thaler in 1908, consists exclusively of small coins, which are legal tender up to twenty marks only, and cannot be used to cash notes against the will of the holder. The Treasury notes, which are also counted as part of the cash reserve, are not legal tender at all. The large proportion of small change kept by the Imperial Bank in comparison with the Bank of England is chiefly accounted for by the fact that the former has five hundred branches scattered throughout the country, which have between them to keep a considerable amount of change for the payment of wages and for the other requirements of small trading. The cash reserve legally prescribed to cover one-third of the issue amounted on December 31st, 1907, to 779.6 million marks, with a paper currency of 1,885.9 millions, of which, therefore, 1.106 millions remained uncovered. The paper currency had therefore approached its outside limit to an unprecedented degree; moreover, the cash reserve contained only 497,546,000 marks in gold, that is, only 26.4 per cent. of the circulation. The economic situation was at the time abnormal, but it was in any case to the general interest that means should be

sought to avoid such a state of affairs for the future. In the inquiry the question of the discount policy was next raised. There is no doubt that gold can be attracted from abroad by a rise of the Bank rate, but at times of crisis this expedient becomes impossible, and the withdrawal of foreign money can even appreciably aggravate the situation, as Germany learnt to her cost in regard to America in 1907. A high Bank rate can indeed prevent the flow of German capital outwards, but it is powerless to arrest withdrawals by foreign capitalists if it should happen that the same shortage of money exists in their own countries. The Bank is also advised from many quarters to keep a large constant supply of foreign gold bills, by means of which it would be able in case of need to exert a controlling influence on the rate of exchange.

This can indeed be done, but only on condition that the procuring of foreign bills is not synchronous with an increase of the indebtedness of the country, which again might have unfavourable results. In the last resort the rate of exchange and the movement of gold depend on the balance of trade of the country, which itself depends on the foreign trade and the condition of the international money market.

The granting of advances, free of interest, against expected consignments of gold was recognised as a useful temporary expedient for the encouragement of its importation. The Imperial Bank had already made advances of this kind, and now extended the time-limit to forty-five days.

A few former supporters of bimetallism also suggested the policy of premiums on gold, which used occasionally to be practised by the Bank of France. The policy is as follows: When the Bank feared a drain of gold, it made use of its right to redeem its notes in silver, and gave gold only against a premium. This expedient, however, is out of the question in Germany at the present day, since silver is minted only into coins of small value, and strictly limited as legal tender.

On the whole, the inquiry pointed to the conclusion that an increase of the gold reserve in the Imperial Bank could most easily be effected through the home trade. The entire gold supply of Germany amounts to at least 3,200 million marks, and improved methods of payment can surely achieve that out of this total an average of about 1,000 millions should always remain in the gold reserve of the Imperial Bank. A secondary means to this end would be the issue of small notes of twenty and fifty marks, which would allow the general commerce to dispense with a corresponding number of gold coins. As early as 1906 a law had

sanctioned the issue of such notes by the Imperial Bank (though not by the private banks), and on December 31st, 1908, 146,000,000 M. of the former and 137,000,000 M. of the latter were in circulation. A considerable increase, more especially of the twenty-mark notes, is not, however, to be recommended, since the public still prefers the gold currency.

A measure of considerable importance which was brought up for consideration by the inquiry was the conferring of the status of legal tender up to any amount on the Imperial Bank notes—except, of course, in the case of payments to be made by the Bank itself. This would help to replace gold in circulation by notes, and seems advisable for other reasons also, just as the notes of the Banks of England and France have long since been recognised as legal tender. In accordance with the views brought forward in the inquiry, the notes of the Imperial Bank were made legal tender by the Bank Act of 1909, and this enactment came into force on January 1st, 1910. At the same time the Act laid down positively and unmistakably that the notes were convertible into gold exclusively.

It was admitted on all hands that the most important and the most effective method of attracting gold from general currency into the coffers of the Imperial Bank was by an extension and improvement of the *Giro*, cheque, and clearing-house systems. The cheque has hitherto been most utilised in Germany for the transaction of the *Giro* business of the Imperial Bank, which extends over the whole Empire, and facilitates the conveyance of payments among all the five hundred branches of the Bank. Thus, in the year 1908, 134,974 millions of marks were taken as deposits for this purpose, and nearly the same amount paid out. The disbursements in cash nevertheless still amounted to more than 15 per cent. of the total sum. A clearing-house system exists under the direction of the Imperial Bank in seventeen towns, and in 1908 a total of 45,961 million marks were cleared in this way. In comparison with the figures that obtain in England, this total is still very modest, and there is a wide scope for the extension of the cheque system. The regulations dealing with cheques have been made uniform by the Imperial Law of 1908, but the stamp duty imposed on cheques in 1909 militates against the extended use of this method of payment.

The special discussion of the Commission next turned on the question whether the minimum *Giro* deposit balance required by the Imperial Bank (on which no interest is paid) should be raised. The Imperial Bank pays no interest at all to its *Giro* depositors,

and requires, moreover, that each depositor shall permanently keep in his account a credit balance proportioned to the extent of his business undertakings. A raising of this minimum balance would, however, scarcely ensure any considerable increase in the Bank's cash reserve, for the accounts are made up for the most part by transfers, by the crediting of discounted bills of exchange and Lombard loans against security, and only in very small proportion by payments in specie. Moreover, the total amount of *Giro* deposits, which in the last years has varied from 600,000,000 to 800,000,000 marks, is considerably in excess of the sum of the minimum balances.

The Imperial Bank accepts, besides the *Giro* accounts, other deposits, but on these also it pays no interest. It is entitled to receive money at interest up to the figure of its capital and reserve funds, but does not avail itself of this privilege. The inquiry revealed a widespread opinion that deposits paying interest and withdrawable at various lengths of notice might increase the Bank's gold reserve. The Bank itself, however, seems little inclined to extend the scope of its business operations in this way. In quiet times it would not be likely to make much profit by this method, while at periods of commercial expansion the capital temporarily deposited would in all probability be withdrawn, and the cash reserve would be depleted at the very time when the greatest demands were being made on the Bank's credit. A special department might indeed be created for such deposits, which might be invested exclusively in German State securities; in that case, however, the Bank would be obliged, in order to avoid making a loss equal to the cost of administration, to pay a very low rate of interest.

For the immediate encouragement of the cheque system, the experts recommended that the Bank be authorised to buy up cheques. Hitherto it was doubtful whether this right existed. The Act of 1909, however, definitely conferred the right both on the Imperial Bank and on private banks, provided that the payment of the cheques was secured by at least two solvent guarantors. External arrangements and expedients, however, cannot do much for the extension of the cheque system of payment, the further development of which must in the main be brought about by the increasing recognition of its usefulness and convenience, not only in the business world, but also in the private life of the well-to-do general public.

A further set of questions concerned the possibility of diminishing the periodic calls made on the credit of the Imperial Bank.

These calls, as we have already remarked, are concentrated in an unusual degree on the ends of the quarters. It would seem desirable to spread the liabilities which fall due at these periods, *i.e.*, payments of interest, rents, mortgage dues, salaries, &c., more evenly over the entire financial year than is now the custom, but attempts in this direction can only succeed very gradually. It was also suggested that at this period the number of days should be increased, for which the clients of the Bank were in any case liable for interest on their Lombard loans. Everyone was agreed that the Imperial claims on the Bank for credit should be diminished, which could be effected both by increasing the means at the disposal of the Treasury and by a further regulation of the negotiation of Treasury bills.

The last group of questions referred not to the regulations of the banks of issue, but to the constitution of the deposit business of the existing German banks which do not issue notes. These banks have been the victims of many attacks. It is feared that the real savings, for the withdrawal of which notice must in most cases be given, are not sufficiently safeguarded with most banks and bankers. As a matter of fact, many small banks try to attract deposits by the promise of a high rate of interest, and it happens not infrequently that such firms become bankrupt and the depositors lose their money. While these losses are an almost negligible fraction of the total sum of the deposits in the hands of the banks, they mean a great deal to the persons concerned, who are usually people in a small way of living. This evil, however, can clearly be remedied only by a spread of economic enlightenment. There are in Germany nearly 3,000 public savings banks, which offer complete security for their deposits, and generally pay $3\frac{1}{4}$ to $3\frac{1}{2}$ per cent. interest. Those who entrust their money to small banking firms in order to obtain a higher rate of interest must know that they are running some risk of loss. Banking law as such can offer no help in this matter, and the remedies proposed in the inquiry were more or less of the nature of policing, with no more than a very limited degree of probable effectiveness.

A more serious matter was the calling in question of the deposit business of the large banks. The moneys which these have at their disposal consist of deposits partly at call and partly at a fixed notice of withdrawal. The latter can in general be assumed to be savings. The larger banks cannot be accused of offering an unduly high rate of interest in order to tempt the public to make deposits, so that if the sum of these constantly

increases, the only explanation we can find is that the more well-to-do classes prefer to deal with a bank proper rather than with a savings bank. This is especially the case with people who sometimes have occasion to transact other business with the bank, such, for instance, as the purchase of public securities. Even the deposits at call do not consist only of business current accounts, but partly also of moneys belonging to persons of independent means, State officials, and other private persons, who like to have these sums at their immediate disposal, even if they are not accustomed to draw on them by cheque. The general security of the deposits in the hands of the larger banks was not called in question, but in the inquiry doubts were expressed in several quarters as to whether the assets were sufficiently liquid. Unlike the English deposit banks, the German banks carry on in addition to their banking business proper other financial operations (similar to those of the foreign bankers in England), namely, the issue of shares, the flotation of companies, and other Stock Exchange transactions. As a matter of fact, it is not possible that the banks should, as they have been accused of doing, use the depositors' money to build railways in countries overseas, but it may happen that larger sums have been locked up in the stocks and shares of newly floated companies and syndicates than would seem suitable with due regard to the liquidity of the deposits. Moreover, it not infrequently happens that by constantly renewing bills of exchange they allow to industrial undertakings credit which goes not to increase the circulating capital of the debtors, but to extend their buildings and plant. The majority of the experts were also opposed to a legally constituted separation between deposit banks and banks dealing with Stock Exchange business. It was pointed out that in England this separation of the two branches of business did not exist in many provincial towns, and that even in London the Joint Stock Banks indirectly took part in new issues and flotations by granting credit. Other proposals were made to the effect that the banks should be compelled to keep a certain percentage of their deposits as a reserve in specie with the Imperial Bank, or to invest a portion of them in German State securities, and that they should be compelled by law to publish exact particulars of their liabilities and assets several times a year. The majority of the experts, however, as well as of the Commission, pronounced against the passing of legal regulations on the subject of deposits, but recommended that the Imperial Bank should use its powerful and widespread influence all over the country to encourage bankers to publish

interim balance-sheets at suitable intervals of time. The majority of the Berlin and a large number of provincial banks led the way in this reform as early as 1908, and it may be assumed that this business practice will become more and more general. The most suitable period appears to be every two months, which has hitherto been adopted by most banks. Opinions were divided with regard to the content of the interim balance-sheets. Some experts recommended a form with very numerous and specialised entries; others considered so detailed an account impracticable. On this question experience must decide. The most important point is to show the liquid assets of the bank and its available balances, bills of exchange, and Lombard loans against security, redeemable at the maximum period of three months, money lent pending the monthly Stock Exchange settlements, and safe and easily saleable securities, as against the liabilities which have to be covered, namely, the current accounts and the deposits of the non-business public. Some people add to these the accepted bills, which play a great part in the balance-sheet of German banks; others, however, maintain that a great part of these is already unquestionably covered at the outset, so that they need not be taken into consideration in estimating the means at the disposal of the bank. A statistical inquiry made in 1906 showed that in forty-five banks, with a capital of 10,000,000 marks and more, 82 per cent. of the deposits and claims were covered by liquid assets as enumerated above, and even if the accepted bills were added to the liabilities to be taken into account, the proportion covered still amounted to 62 $\frac{3}{4}$ per cent. On the other hand, the sums invested by these banks in speculative enterprises amounted to only 34.6 per cent. of their total property as represented by their original capital and reserve fund (a sum of 2,740 million marks). As the deposits are as little likely to be all simultaneously withdrawn as are the notes to be simultaneously presented for redemption in cash, the condition of these banks as regards the liquidity of their assets appears from the figures given above to be very satisfactory.

It was considered by the experts that an exact distinction between the deposits representing savings and the current accounts and deposits at call could hardly be shown in the published balance-sheets. Nevertheless, it would appear possible to earmark the deposits at more than eight days' call, which consist chiefly of savings.

Some experts spoke in favour of establishing State deposit banks; others of founding a national institution for the safe-

guarding of deposits; several recommended the formation of an Imperial Board with power of compulsory supervision of the deposit business of the banks. The majority, however, both of the experts and of the Commission, declared against the introduction of legal regulations in these matters. On the other hand, the Commission recommended a voluntary organisation for the supervision of the deposit system: the Imperial Bank should call to its aid a council of experts, whose duty it should be to examine the periodical published reports and watch their adequacy; the Imperial Bank would, by means of its numerous branch institutions, be in a position effectively to oppose any observed abuses by withdrawing its credit.

It is too early to pronounce on the effect which the proposals of the Commission may produce on the deposit system. In the first instance, the decisions of the inquiry have made themselves felt in the Act of June 1st, 1909, which, as already stated, contains as the most important innovations: the acknowledgment of the Imperial Bank notes as legal tender (from January 1st, 1910) and the raising of the duty-free "contingent" of the Imperial Bank with the permission of a further increase of issue at the close of each quarter (to come into force on January 1st, 1911).

W. LEXIS

THE NEED AND METHOD OF IMMEDIATE REFORMS IN THE CURRENCY OF CHINA. *

I HAVE repeatedly seen it remarked in newspapers and reports, both in English and Chinese, that our currency is in a very confused and chaotic state, and that consequently trade is being much hampered by it. The truth of this fact I cannot deny ; and it is often too painful to me to have to refer to it ; and it is extremely regretful to all concerned that no remedy has yet been found nor effectively applied. In this paper an attempt is made to explain certain measures which, in my opinion, would greatly rectify the situation so much complained of, and I will also try to show how these measures can be carried into effect.

Now the currency of China consists of two kinds, like most of the currencies of the world, viz., metallic and paper currency. For metallic currency we have bullion and coins. The bullion is mainly of silver and is largely used for settling commercial transactions of considerable amount, and the coins, which are used both for large and small transactions, consist of Chinese Imperial coins of silver and copper, and numerous kinds of foreign coins, chief of which are the Mexican dollar, the French piastres, and the Portuguese carolus. As to notes we have also a large variety of them. I cannot say exactly how many kinds of notes there are in circulation, because statistics of this kind are not available. But I might mention that in our country any and every bank, either native or foreign, nay, even any and every firm which calls itself a bank, can and does issue notes, without any regulation whatever as regards the amounts issued, or other details. The free trade or *laissez-faire* principle is in full swing there.

The result of this freedom of note-issue has been well demonstrated by the British *attaché* in Peking, in a recent article in the *Standard*. Runs have been of not uncommon occurrence and credit has thus been injured. The disorganisation of credit has caused the stagnation of trade for a considerable time.

The diversity of coins which are in use in China gives rise to

great complications in the calculation of internal exchanges, and thus retards the development of trade both local and foreign.

A still greater evil resulting from the existing methods of note-issue and system of coinage is the redundancy of currency. Coins are being forced into circulation daily in vast quantities. These coins, together with large sums of notes, cause the inflation of prices. In China wages are still determined by custom rather than by the action of demand and supply, the consequence being that the same dollar which used to purchase comforts can now only purchase the bare necessities of subsistence: this evil being much aggravated by the fall in the price of silver and by the depreciation of the copper coinage.

Another great evil which must not escape attention is the uncertainty in the fluctuations of our foreign exchanges. Many of our importing, as well as exporting, merchants have met with ruinous losses in consequence of the erratic changes in the value of silver, which are almost beyond all the pre-estimations of human intelligence.

It is therefore evident that there is great urgency for currency reforms in China, in order to remove—or rather to alleviate—the above-mentioned evils, as well as to facilitate the development of our trade, and in order to do this we shall have, firstly, to resort to regulation in place of *laissez-faire* in matters of note-issue, and secondly, to establish a system of national uniform coinage, preferably to be based upon gold. The space at my disposal does not allow me to deal with both problems here. I shall, therefore, only discuss the problem of coinage reforms, though both questions are of first-class importance.

That China should establish a national uniform coinage is beyond all dispute, but opinion is divided as to whether China should base this system upon gold or silver. The one plan suggested consists in the establishment, on a silver basis, of a uniform monetary system consisting of silver and copper coins; and the other in the establishment, on a gold basis, of one consisting of gold, silver and copper coins, or of silver and copper coins only, but with a fixed gold unit as the standard.

The proposers of the silver plan say that China will and must eventually have a gold currency, but that before the adoption of the gold standard she should begin with a uniform silver currency. They argue, and quite correctly too, that, as our people have now no uniform system of coinage, and as their commercial transactions are mainly based upon bullion of silver and copper, they should first be well trained in the use of a uniform currency, so

that afterwards, when they have become quite accustomed to the new system of coinage, the same can safely be brought on to the gold basis. They liken the establishment of a monetary system to the mounting of a ladder rung by rung, or the going of a journey step by step. They point out that, as the current money among our people consists principally of a great variety of foreign and local silver coins, alongside which there are the silver "sycee" and the copper "cash" and the ten-cash pieces, the most logical course of action to be taken for reforming our national currency would be the unification of the existing currencies, and thus the extinction in our coinages of that want of a uniform value which has been one of the greatest obstacles to the development of our trade, and which affords a loophole for lucrative trickery.

They also observe, but wrongly, that, if the gold standard were to be adopted now, gold coins will have to be issued, and a gold reserve would also be necessary; that, if we were to have a gold currency of, say, four shillings per capita, which is, in their opinion, the lowest figure that can be given, the whole population of China of 400,000,000 would require £80,000,000 of gold, which is approximately equal to one-eleventh of the world's total stock of that precious metal; that, if that sum were to be drawn out of that stock, even on the supposition that we had sufficient credit to draw upon it to that amount, a monetary crisis would be sure to arise in Europe and America; and that, in short, we could not get this amount of gold at any cost or under any circumstances.

They further point out that the economic conditions in China are against the adoption of the gold standard. They think that there commodities are cheap and the people are economical. Even silver is sometimes found to be possessing too high a value to be much made use of by the ordinary traders. The coining of gold would, therefore, be obviously unnecessary.

Having thus criticised the gold standard plan, the advocates of the silver plan say that, before any system of uniform currency, even on the silver basis, could be established, numerous difficulties have to be overcome, and the suggestion that the new monetary system is to be based upon silver, would be more acceptable to the conservative mind of the Government and the people than the suggestion of adopting a gold standard, inasmuch as the former would seem to them to involve a less-felt departure from ancient usages than the latter; and that, finally, the establishment of a uniform monetary system on a silver basis would be a practicable step towards its ultimate establishment on a gold

basis, as can be proved by the example of India. Such are the arguments put forward by the advocates of the silver basis plan.

Now to discuss the other suggestion—that of establishing a uniform monetary system on the gold basis. The advocates of this plan, of whom I am one, advise that China, while keeping in view the reform of her coinage, should adopt a system which has gold as its standard; that she should adopt a system similar to that which has been established in India, the Philippines, Siam, the Straits Settlements, &c., and consisting of silver, nickel and copper coins with a fixed gold value at which all coins issued are to be always maintained, and into which they are always to be convertible; and that eventually, but gradually, she would have this system perfected by issuing gold coins as well, and by having a double legal tender of gold and silver coins in the Empire—that is to say, she will then have the same system as now obtains in the countries of the Latin Union.

* The advantages of adopting the gold standard as the basis of the new coinage system are many, of which five may be enumerated. Firstly, there will be no greater disturbance in putting our new currency system on a gold basis than on a silver basis. As we have seen before, prices in China are mainly on a standard based on bullion of silver and copper. If this condition is to be changed, there will inevitably be a re-adjustment of prices. To change from bullion to coins with a fixed gold value, would not involve a greater disturbance to the people than to change from bullion to coins with a silver value. But to change from bullion to coins with a silver value, and then again to change from coins with a silver value to coins with a gold value, would involve two re-adjustments of prices, and these repeated re-adjustments would be sure to result in the upsetting and disarrangement of the business relations of the country.

Secondly, owing to the uncertainty in the price of silver, it is easier to adopt the gold standard at a time when the new system of uniform coinage is being first introduced, than when it has already been established. One can never be sure as to the future of the gold price of silver. If, therefore, the new coins should first be given a silver value, the uncertainty with regard to the gold price of silver would lead to great speculations, and give rise to great difficulties in fixing the gold value when it is desired to bring them on to a gold basis. If we could be sure that the price of silver would continue to fall, and never rise again, then when the time comes when we want to give the coins a gold value, they could, perhaps, be given the gold value of

the day, and further falls would simply convert them into token coins. Even then there would be many arithmetical complications and difficulties in deciding their relative denominations, to say nothing of the unnecessary disturbance. But, as far as I am able to tell, there cannot be any appreciably great increase in the annual output of silver, owing to the fact that there is very little room for improvement in the art of silver extraction, while the demand for silver for manufacturing purposes is rather on the increase. Hence there is also the probability of the price of silver rising. But as to the validity of these statements, nobody can definitely assure us. Should silver then for any reason rise in value instead of fall, our Government, when about to give the silver coins a gold value, would have to give them a considerably higher value than their bullion purports to be—say 20 or 30 per cent. higher—as otherwise, if only a 3 or 5 per cent. higher one be given, a slight rise above that value would quickly lead the silver coins into the melting-pot, and a slight fall below it would cause their coinage again. What the expense would then be to the State of this continual recoinage—to say nothing of the loss—can easily be realised. If then a 30 per cent. higher value has been decided to be given, by what method should the coins be raised to that gold value? Is our Government to give that value rapidly or slowly? If it should be given rapidly, all at once, those wealthy merchants and others, who have large possessions of the silver coins hoarded away, would be made so many times richer for no merit whatever of theirs, and at the expense of the nation. If, however, this 30 per cent. should be raised gradually, say 5 per cent. at a time, the ever-decreasing prices of commodities, which would result as the consequence of the continuous raising of the value of the coins—not to mention that the evil above dreaded still remains, though on a reduced scale—would bring our industry and commerce to a standstill. In both cases our Government would be in a most hopeless dilemma, and, in fact, none of the above-named methods is practicable.

Thirdly, our Government would be able to reap a handsome profit from coinage, which would otherwise be lost, and would greatly help the introduction of the new system. If the system is to begin on a gold basis, our Imperial Government could easily fix the ratio between gold and silver at 32 to 1, and would be able to make a profit of at least 20 per cent. on every coin it issues; and, as long as the price of silver should not rise above the ratio upon which the profit is based, a handsome sum of well above £30,000,000 can be made as profit, if eight shillings per

capita for 400,000,000 people be taken. I might here mention, for purposes of reference, that the French Government makes a coinage profit of 150 per cent., and the Indian Government one of 90 per cent. on their respective *standard* silver coins. As to the method of keeping the coins at par with their face value, the subject will be fully dealt with later.

Fourthly, the rates of foreign exchanges would be more steady. Safe and profitable trade between nations can only be secured by the relative stability in the rates of exchange between those countries, and their stability is to a considerable extent dependent upon the state of the currencies of the respective countries between whom there are trade relations. If their currencies are relatively stable, the trade between them will be safe and prosperous, while, if serious fluctuations are unavoidable, commerce cannot be profitably carried on.

The recent fluctuations had a detrimental effect upon both the silver- and gold-using countries. Moreover, these fluctuations, arising as they do from no cause that can be foreseen, are of such a nature that they are most ruinous to the trading communities concerned. Often times either the importer in our country, or the exporter of a gold-using country, finds his profits wiped out or even, when the worst comes to the worst, incurs a heavy loss by a sudden fall in the gold value of silver; or sometimes the exporter of our products finds his profit greatly diminished by a rise in the value of silver; which facts are but of too common occurrence, and operate as serious hindrance to the development of our foreign trade. On the other hand, the increased foreign trade which would result from a stable exchange would bring in an increased revenue—from customs, &c.—which would greatly help the State to carry on several important national reforms. If, too, the exchanges were steady, more people from our country would go abroad as students, and in other capacities, who would bring back with them Western learning, Western ideals, Western institutions, and Western inventions which we want so badly and seek so earnestly.

Another very serious aspect which too often escapes the attention of our statesmen is the fact that, as long as silver continues to fall in its value, our foreign debts are correspondingly increasing, and unconsciously so. The fall in the value of the commodity in which a debt is to be discharged would require more of that commodity to pay for the same debt than if it had remained unchanged. The several foreign debts that we have contracted within the last decade and more must be paid for.

Should the value of silver rise to a considerable extent, well and good. Should it fall as it has been falling, the question will be of a very serious nature for our statesmen and others to face. Whether the price of silver will rise or fall, we have no reliable means to anticipate; but that the spirit or element of gambling—such as the uncertainty in the value of our money—should be removed from sound State finance is beyond dispute; and this removal can only be effected by the adoption of the gold standard as the basis of our monetary system. In Japan and India the fluctuations used to be of a similar character, but they were soon put a stop to by the introduction of the gold standard.

Fifthly, our national credit would be better strengthened. How great is the asset of a nation in possessing a good credit in the eyes of foreign nations is too obvious to require any expatiation. I need only point out one or two facts before one fully realises the immensity of the advantages under this category.

An Eastern financial agent residing in London once remarked that he had never been able to borrow money in the money market for the government which he was representing so cheaply as he was able to do after the introduction of the gold standard into that country. He remarked that the effect was as immediate as that of touching the button in ringing an electric bell. No sooner did the news of the adoption reach the lending money market than the drop in the lending rates took place. The government in question was thenceforward able to convert many of the debts, which had been contracted in former years, and to save the nation a great deal of money. Count Matsukata, of Japan, has said also that it was not till after the adoption of the gold standard by that country that she was able to borrow at 4 per cent. interest. She had hitherto been paying a much higher rate than that. The Count attributed the friendliness and moderateness of the money market to the strengthened state of the Japanese credit, in the eyes of the investor, through the introduction of the gold standard. Inasmuch as we are, and shall be for a long time to come, greatly indebted to foreign nations, too much attention cannot be given to this subject.

Moreover, the establishment of a uniform and complete system of coinage of a nation is rather like the building of a house than the mounting of a ladder or the going of a journey. The walls of the house should be built together in order that they may always have a harmonious relation from the beginning.

That no gold coins would at the present moment be required for internal trade purposes in China is, I think, beyond all doubt. But that is no reason why the gold standard should not be adopted. On the other hand, there are many evidences which indicate that, as our industry and commerce develop and expand, gold coins will be required, and such a day will not be so remote as is generally thought. But, in the suggestion that China should now adopt the gold standard, it is not to be supposed that it was proposed therein that our Government should at once issue gold coins to be put into general circulation. It is sufficient that a gold value be given to the new silver coins, which silver coins will still be the general medium of exchange in the country. I may be questioned as to how may this somewhat artificial value of the silver coins be kept. Judging by the experience of other countries, I may say that it may be kept by means, among other devices, of our keeping a reserve fund. As to what this reserve fund is, and how it is to be created and used, I shall explain later on.

I am glad to state that our provincial mints have already undergone several steps of reformation, and the viceroys, especially those who have been appointed recently, have already shown their intelligence in perceiving the enormous advantages which would result from their mints being controlled and managed by one and the same authority. I might also mention that our bankers are mostly intelligent and patriotic people, and would all be enthusiastic in sacrificing personal interest for any public national advantage. They will, I think, find themselves more than repaid for the loss of profit from money changing, which now is one of their functions as bankers, by the increased volume of banking business, which increase would be due to more extensive trade and industry, which are themselves benefited by the improved state of the currency.

Should the conservatism of the Chinese people be alleged to be at all a serious barrier in the way of monetary reforms, I may point out that, if I may say it, we are far less obstinate than any other race in the world. I am far from being a eulogist, but one can easily realise this if he is referred to the success which we, with the co-operation of other nations, have achieved in the suppression of the smoking of that obnoxious drug, opium. I am happy to say also that our police system is being rapidly improved, and with modern complicated minting machines, fears concerning illicit coinage may be greatly alleviated.

Further, it is not to be doubted that, as it is also the express

and natural desire of all foreign nations that have trade connections with us, we should have as sound a monetary system as possible; and, as the best system is one on a gold basis, it is not likely that any international complication of any consequence should arise which would involve any strain upon our Foreign Office. On the contrary, I have every reason to assert that the nations of Europe and America will all come forward to welcome any step that we may take towards the establishment of this new system and—nay, they will struggle and also join hands to render us every hearty support and willing co-operation in an undertaking which has so vast a national as well as an international importance. Such is also the unanimous opinion that has been expressed by the leading authorities of this country.

Thus I may summarise, and say that, the more one studies this problem of currency reforms, the more is one convinced that for China the second plan—the plan of establishing a currency system on a gold basis, all at once, and once for all, instead of first beginning with a system of uniform silver coinage with a silver value and then giving these silver coins a gold value—is on the whole better, and the wiser of the two; what other countries have done, we can do too, if only the same amount of caution, energy, and patience be forthcoming.

Now I come to discuss the system itself. The question arises as to what should be the coins and their denominations to form this new system of coinage, bearing in mind that silver will still, for a considerable time to come, be the chief metal as the medium of exchange of the people of China. Therefore the new coinage system, though based upon gold, would be one adaptable also to a system on the silver basis, only in one case the value of the currency would be fixed in gold, and in the other it would vary according as the gold price of silver rises or falls; but the value of the coins among themselves would be fixed, and that would be a great blessing in itself.

The system of currency which in my opinion will best suit China is one which should consist of silver and copper coins. These coins are to be given a fixed gold value when they are issued. When the time comes when the business has assumed such a volume as to need the use of gold, gold coins will then be issued for general circulation. Here I must, before going further, add that, should it be found advisable to issue gold coins for purposes of experiment, such a measure is not objected to at any time. All the coins issued must be uniform in every respect throughout the Empire, and any variation is to be forbidden,

Every one of the civilised nations of the world, except China, has a uniform national currency, which consists of standard and token coins, and has a definite name for its unit of account. The pound sterling, the dollar, the mark, the franc, and the rouble are the units of Great Britain, the United States of America, Germany, France, and Russia respectively. Their coins have a definite ratio with one another, and, no matter what the trade conditions are of the country, one gold coin is always worth so many silver, nickel, or copper coins. All the coins that are in general circulation are issued by the central governments, and are uniform throughout the country where they are issued.

For China, a coin to be called the "Yuan" should be the standard coin, and "Yuan" be the unit of account. Some people have suggested that our unit should be the Kuping tael, because it is the official unit. But it must not be forgotten that the Kuping tael is an official unit only in a very limited area. Our Government, in fact, uses as many units as there are names of units in the country. The latter are countless, and the exact number of them is not known. Firstly there are, within my knowledge, about 150 kinds of tael, of which the Kuping tael is one; and, secondly, there are a surprisingly great number of coins, native and foreign, which are to be found in general circulation among the peoples of the different provinces. Although the generic name "tael" is generally used in the northern and western provinces of China as the unit of account, the more populous and richer provinces in the south and east use the Mexican dollar, and, in some parts, the Portuguese carolus, as the unit of account. By far the largest amount of the business of China, both of an international and local character, is, however, being carried on in the latter provinces—*i.e.*, the east and south provinces. Even in the north and west it is far from being correct to say that the same unit, the tael, is employed—nay, not only has such never occurred in one province, but also such has rarely happened even in one district of a province. Moreover, in these northern and western provinces, the Mexican dollar is most general in use. Dr. Morrison also pointed this out in a recent issue of *The Times*.

This naturally leads me to the conclusion that, in deciding as to what we should adopt as the unit of account of our new coinage system, one of the value of a Mexican dollar should be chosen, and the name "Yuan" be given to that unit. As "Yuan" means a "round piece" in the Chinese language, and as that term has long been used in counting silver coins, this

unit will, I think, find general acceptance. If the name "Kuping tael" be given, it will have to be a coin of more or less the weight of an ounce, as the meaning of that term suggests, or else people will more than ever be puzzled in finding that the tael coin does not contain a tael of silver which it purports to do. That they would hesitate to accept them would obviously be certain; and, should a coin equal exactly in weight to a tael, or, in other words, to an ounce of silver, be issued, they would be very inconvenient to carry about.

"Yuan" having been chosen as the unit of account, and also the "Yuan" being the standard coin of our new currency, we next ask ourselves as to what should be its value in gold.

I suggest that the "Yuan" should be given a value equal to two shillings in English money. In selecting this figure I have in mind the view that, as the exchange between other units and the English pound sterling is everywhere very well known, the new Chinese unit would itself be easily understood, and complications, arising usually from foreign exchange calculations, would be reduced to a minimum. It is also to be remembered that the United States will, in my opinion, be greater and greater every day in her commercial as well as political activities; and, while London will always remain the financial centre of Europe, New York will probably be that of the Americas; and, before a generation shall have elapsed, the two will be rivalling but equally important centres for the world's finances. Therefore, in deciding the value of our unit and standard coin, the American dollar must not be left unconsulted. The fact that the American half-dollar is roughly equal to two shillings, and that the English £ is known to the whole world, has justified me in recommending the two-shilling value to be given the new "Yuan."

We have now seen that the unit of account of the new system should be "Yuan"; that the standard coin should be the "Yuan" coin, and this standard coin should be given a gold value equal to two shillings in English money. As to its weight, I think it should be seven mace and two candareens, which would be 26.80 grammes approximately. This weight very nearly corresponds to that of a Mexican dollar. Its fineness should be —nine-tenths to be pure silver and one-tenth to be copper and tin. As the fineness of the Mexican dollar is 898 per thousand, nine-tenths fineness would, therefore, be slightly better.

Here I may point out that several provincial governments have issued coins of more or less the same weight and fineness as above mentioned, but, owing to lack of uniformity and the

want of proper legislation, no great success has yet been achieved.

As for subsidiary coins, which are to serve for small change of the people, the 25 cents, 10 cents pieces, to be made of silver, and the one-cent and the cash pieces, to be made of copper, should be issued. It will be noticed here that the cash is to be issued. I may point out that, on account of the excessive issue of late years of the 10 cash copper-pieces, and thus their inevitable depreciation, the cash, which is a coin dating from a very early period and has been the chief medium of exchange of the poorer classes, has almost gone out of circulation. This has caused great distress to these people, because the displacement of the former small cash by the 10 cash pieces meant the raising of their cost of living, but without a corresponding rise in their wages. It must be remembered that there are no Trade Union wages in China.

Reference has been made to the question of the reserve fund. By a reserve fund is meant a sum of money, either in the form of precious metals or in the form of securities, or in both, kept at a central place or places in order to meet conversion demands made for the purpose of settling foreign trade balances. As London is now the international money market, and as every country of the commercial world now keeps in London a reserve fund for a more or less similar object, I suggest that London should be one of the places where China should keep part of her reserve fund; and that the other place for keeping the rest of the fund should be New York. The reserve fund would be merely kept to let our foreign creditors know that, whenever we are called upon, we are ready and able to settle our debit balance with them which may have arisen from trade transactions, and to give them equivalents in gold for our silver coins. I venture to say that, in fact, this reserve fund will not be much drawn upon, for the reason that the foreign trader, finding that his money can be more profitably invested in China than in his own country, and especially if foreign income taxes increase, will, if he can, leave his money in the former country instead of sending it home. Therefore our reserve fund kept with London and New York bankers will really serve as a means merely to satisfy certain psychological weaknesses of the human mind. This only illustrates the truth of the well-established economic principle that money flows where the rate of interest or the yield is highest, of course assuming that there is safety.

Besides this reserve fund kept in Europe and America, we also should have a reserve in China. By this assertion I must

not be wrongly taken to mean that a reserve of that kind is to be created so suddenly as to give rise to those fancied fears which the members of the silver plan school have seemed to entertain. On the contrary, the accumulation of this home reserve of gold is to be so gradual, covering a long period of years, and with such precautions, that the effect of absorbing the metal will practically not be felt to any noticeable degree. As soon as we begin introducing the new coinage into the country, we should start the process of accumulation until the amount thus accumulated arrives at a figure which, in the opinion of expert financiers, is large enough for meeting all practical purposes and for disposing of all cases of emergency.

If we want to know what this total reserve should be, we must look to the experiences of other countries. In India, the Philippines, and elsewhere, a reserve equal to 10 per cent. of the total home circulation of silver has been found to be amply sufficient for meeting all cases of drains arising both from the settlement of foreign trade balances as well as from any local overflow of silver currency. In my opinion the total currency reserve, which China will eventually have to keep, will amount to not more than £16,000,000, of which one-half is to be in gold, and the other half in the form of first-class and easily realisable securities. And it may be added here, that however adverse the foreign trade conditions of China may have been in the past, the annual export of treasure or precious metals, which may be described as the small change of the mercantile nations for settling trade balances, has never, to the utmost, exceeded the sum of £3,000,000; and, as China's resources are developed as time goes on, these balances will gradually turn in her favour.

A word of explanation may be needed for the use of the home reserve which I have previously alluded to. The home reserve is intended to be used for converting into gold any "Yuans" that may be presented for such purposes. The gold, thus applied for, may be for internal or external purposes. But gold from the reserve is to be given at such a rate in terms of "Yuans" that, if it is intended for paying foreign imports, the importing merchant would find it cheaper and more convenient to buy a gold draft on, say, London or elsewhere than to procure the gold from the home reserve and ship it; and that, if the gold is to be for internal purposes—either for use in art manufacture or any other purpose—the applicant would probably find it cheaper, or equally cheap, to buy it from the open metal market. In no case is this reserve gold to be given except at the fixed "Treasury draft rate," the price which our Treasury charges for drafts on foreign centres—and this draft rate is always to be slightly higher

than the rate which the "foreign exchange banks" demand in ordinary times. This provision of internal or local convertibility of the "Yuans" gives our coins the character of the English bank note, though in the case of our "Yuans" a slight premium would, in a sense, be put on gold; but this premium is nothing more than the commission charge which all banks make on their gold operations, or the brassage which any government is entitled to make.

In that case, as long as our reserve fund abroad is sufficient, or as long as our Treasury is always prepared and able to give exchange drafts on foreign countries, we need not hesitate to make "Yuans" convertible, but we know very well that, as long as the new coins are not issued in excess the "Yuans" will have no occasion to be presented for such conversions.

Before concluding I should perhaps say a word in regard to the precautions that should be taken when introducing the new system. Firstly, the Imperial Government, before taking any step in passing the necessary preliminary edicts and laws, should publish and distribute, among the people of all walks and ranks, pamphlets in the colloquial as well as the literary languages, showing the merits of the new monetary system and the evils resulting from the existing conditions of the old currencies. Among other things one fact must be mentioned and strongly emphasised, and that is that our sovereignty is much impaired, inasmuch as foreign governments can circulate their coins in our country.

In this respect foreign governments must be informed, and have it explained that, in using this device, we are not arousing any anti-foreign feeling, as the very purpose of the adoption of this new monetary system would have already shown them. Such a measure is resorted to because it is an admirable means for changing the habits of a people. In connection with this, the local magistrates are also to be charged with giving due and full explanation of the new monetary system, and with giving any other particulars connected therewith.

Further, in all matters connected with the putting in force of the new system of coinage in so far as such effect the bankers and merchants, both foreign and native, their opinion should first be obtained; in a word, they must be treated with every courtesy in order that concerted action between the merchants and government may be assured, and this concerted action will prove to be one of the essential factors which will bring the new monetary system to success.

REVIEWS

Unemployment. The Result of an Investigation made in Lancashire, and an Examination of the Report of the Poor Law Commission. By S. J. CHAPMAN, M.A., M.Com., and H. M. HALLSWORTH, B.Sc. (Manchester: The University Press, 1909. Pp. xiii+164. Price 2s. net.)

THIS is the type of book that we require in the treatment of such subjects as unemployment. For, owing to the intricacy of the subject, and to its immense scope, much detailed work is required, and some of the best results will be obtained by confining oneself to certain districts or certain trades. Now Lancashire, the home of the great cotton industry, has in many respects a character of its own, and its unemployed problems will differ in many details from those, for instance, of London or the Midland towns. Many features are common to all, and the authors rightly point out that in its fundamental aspects the problem of unemployment is everywhere the same, and only the details differ. Still, at present it is these sectional inquiries that are valuable for the reasons given, and because the atmosphere of each trade or district differs subtly from that of any other. Nevertheless, a series of such inquiries will probably show a convergence from each several point upon a single centre.

In examining the Poor Law Reports, the authors start by pointing out that as regards unemployment the divergences of Majority or Minority are "neither fundamental . . . nor beyond reconciliation," and in the following pages each receives an almost equal amount of criticism. The writers defend the low wages clause of the Chamberlain circular of 1886, and point out that insurance alone will not prevent the deteriorating effects of a long spell of unemployment. Most interesting, however, is their doubt as to the efficacy of either of the suggested schemes for dealing with those left over by decasualisation. "What they need, if they are not to slip down a rung of the industrial ladder, is work," and they hold that, with a proper organisation by

Labour Exchanges, this will be more feasible than at present, and that the abuses of existing relief works can be avoided. "

The scheme of the book is stated in the opening chapter. It first attempts to estimate the numbers of the unemployed. "These merely tell the magnitude of the problem, but it is important that it should be known," for unemployment, "even when trade is generally good, is 'far from being non-existent.'" After this they proceed to investigate causes, which are here classed as "cyclical," "seasonal," "accidental," and "residual." Finally, they attempt to suggest remedies.

The sources of information as to unemployment are many and various. The chief of them are the Trade Union returns, the *Labour Gazette* returns of numbers employed and wages earned, which are the best available sources of information as to loss of employment by short time, and the returns of Distress Committees, Guardians' Censuses, and so on. The authors rightly insist on the fact that dismissals do not represent anything like the full decline in employment. "Were labour usually dismissed in proportion to the contraction of production in times of bad trade, the numbers of the unemployed would evidently be enormous." An illustration of this is given in an interesting table showing for various trades the proportion of the decline attributable to dismissals and short time. In view of this the statement that the Board of Trade curve for 1908 exaggerates the depression of that year is very unconvincing. In fact, the majority of the trades where dismissals are resorted to show a percentage that is above, or only a little below it; whilst many of the short-time trades show a total decline in employment that is equal to the average percentage of unemployment. Coal-mining is the most significant exception. The arguments adduced for elastic piece- and time-wages varying with trade fluctuations are well worth considering, given adequate safeguards, as the authors insist. There is also an interesting discussion of rival systems of short time, and the chapter on Distress Committees, Guardians, and censuses is well done.

The next two chapters deal with "Ages, Trades, and Past Work of the Unemployed," and Unemployment among Women. It is probably not a fact that the Distress Committee returns show any great disparity of unemployment among young men in proportion to the population. But comparatively it is excessive, for the Trade Union returns show a very much smaller amount of unemployment at the lower, than at the higher, ages. "No doubt," the authors remark, "appreciable numbers are the rejected

of the skilled trades, but if these numbers are the main cause, why are so many rejected when the skilled trades are certainly not receiving their proportionate share, according to the state of demand for labour, of the rising generation?" This incidentally contrasts strangely with the authors' statement that real wages are rising, owing to the trend of population towards the more highly paid trades, and that in periods of good trade we are fully employing our population. They rightly draw attention to the need for the organisation of boy and girl labour, and to the fact that unemployment among women is greater than is usually supposed. Here there is a shortage of highly skilled labour together with a large over-supply of unskilled.

The treatment of unemployment cycles is good, and the authors rightly insist that the tendency of industrial progress is to decrease their violence. Unfortunately, the figures of the third fiscal blue book were not at their disposal. The uncorrected percentage shows a higher rate of unemployment in 1879, 1885, and 1886, than in 1908, but that for the sixteen Unions making continuous returns shows the latter to have been the worst year since 1879. A consideration of the returns of individual trades supports this, and also the supposition that the higher percentage for trades other than engineering and ship-building is delusive, owing to differences of weighting. Indeed, the authors seem hardly justified in maintaining that "irregularity of employment is certainly getting no worse." For, in addition, one has to allow for greater use of short time, even in trades like engineering, the growth of the minimum of unemployment in good years, and of the fluctuating at the expense of the stable trades, and probably the increase of casually employed labour.

The interesting discussion of seasonal unemployment is accompanied by a consideration of insurance, which "has been advocated largely with a view to this." The objections raised to the scheme are effectively dealt with. For the public provision of work the authors make out a strong case, given a thorough and effective system of Labour Exchanges. Even so, however, the better plan seems to be to increase demand by increasing the amount of work done, and carrying it out by contractors in the ordinary way. Relief work would then be left as a very last resort. The authors rightly insist on the more than average supervision required for unemployed labour, and condemn the "half week" and "short day." Moreover, the principle of paying wages below the ordinary seems the right one, and they recognise the value of the regulation of public work.

The book concludes with an interesting chapter on Labour Exchanges, and a short one of Summary and Conclusions. It is well illustrated by a number of excellent tables, and the charts also are good, though the way they are printed scarcely does them justice. The index is beautifully clear. As a whole the work reaches a very high standard, and the authors are to be congratulated on making a valuable contribution to the literature of the subject.

N. B. DEARLE

L'Apprentissage et l'Enseignement Technique. Par M. FERNAND DUBIEF, Ancien Ministre, Vice-Président de Chambre des Députés. (Encyclopédie Internationale d'Assistance Prévoyance, Hygiène Sociale et Démographie. Giard et Brière. Paris : 1910. Pp. 506.)

THIS study of industrial training in France has an additional interest as showing many of the defects and difficulties to exist there from which we in this country are suffering. Indeed, there is often a striking similarity between the two countries. Neither in France nor in England, it would appear, has enough been done to replace the old system of apprenticeship by a new and more adequate one; and France is peculiarly liable to suffer because so many of its industries still depend very largely on the taste and dexterity of the individual worker. So in both countries the apprentice is superseded in a large number of trades by the boy labourer, or, in M. Dubief's felicitous phrase, "*petite-main*." The result, again, is, in France, complaints on the one hand as to the absence of good workmen, and on the other, the specialised worker (*manœuvre*), easily replaced by juvenile or female labour or from the unemployed.

Yet, though apparently widespread, the trouble would seem not to be universal, since in one place M. Dubief contrasts the trades where apprenticeship does and does not survive. "*Le chômage est devenu plus intense dans les industries où on ne forme plus d'apprentis.*" It is a pity indeed that M. Dubief has not devoted more space to describing the condition of affairs in individual trades. Again, though indentured apprenticeships are rare, verbal contracts are still common, and, in spite of their defects, these must possess some value; and more efforts have been made, notably at Lyons, to carry out the law which established inspection of apprenticeship, and the Higher Consul of

Labour has enabled local commissions to be established anywhere for this purpose.

The author proposes to make the certificate of apprenticeship once more a real proof of sound knowledge of a trade, to limit the number of apprentices, and establish authorities for their systematic inspection; whilst commercial apprenticeship also requires further development. This alone, however, will not suffice, but must be supported by technical schools. The author sketches the work already done, complaining that at present it is too theoretical and insufficiently practical. This sounds familiar to English ears. Apprenticeship should be restored where possible; otherwise technical schools and courses adapted to individual trades must be established.

It is with such schools as they are in France and elsewhere, and as they should be, that the book chiefly deals. Apparently M. Dubief does not refer primarily to the trade schools where young workmen go of an evening to improve themselves. He talks of the manufacturers and merchants of England ceasing to look upon the shop or factory as the place where a trade is to be learnt (or, rather, "picked up") haphazard, but rather as a place where knowledge obtained elsewhere is to be applied. This is partly due to the fact that the French schools have mostly full-time day courses which last for three years or so, as a preliminary to employment in the workshop, though there are exceptions. For M. Dubief is not unaware of, nor does he fail to appreciate, the work of evening schools.

The second part of the book is devoted to a description and criticism of existing technical training in France, beginning with an historical sketch of its development. Higher technical education is given at the Conservatoire des Arts et Métiers, and secondary technical education at the National Schools of Arts and Crafts. To primary technical teaching a good deal of space is devoted; and there are many types of school, including a certain number of Schools of Apprenticeship. Not the least interesting are the Écoles Nationales d'Horlogerie, which were established to teach the whole of a craft that cannot be so taught in the workshops owing to the subdivision of processes. Still more interesting is the six months' course for workmen wishing to perfect themselves in a single branch of the trade.

The author protests strongly against the idea that these schools are only intended to provide a body of foremen and leading hands. On the contrary, they should be available for workers of all sorts. Again, they are contrasted favourably with the

Écoles Primaires Supérieures, where the curriculum is far too theoretical and literary, tending to turn out inferior artists and designers rather than good craftsmen. Indeed, it is interesting to find the same complaints as to the preference for the clerical professions over the handicrafts and the same contempt for manual labour, that have been so common in this country. Again, like so many English educationists, M. Dubief has the same belief in the superiority of technical education to workshop teaching, not only for the higher ranks of labour but for the ordinary workman. Great success has certainly been attained in France by the three years' course previous to entering the workshop, and youths so taught often outstrip their fellows who have spent all their time in the shop. But M. Dubief hardly allows sufficiently for the picked character of the former, nor for the fact that, except in a certain number of trades, the numbers receiving technical training are comparatively few. The proportion is greatest in the engineering trades, which under modern conditions seem peculiarly suited to it. Finally, in France, as in England, the teaching of the schools only reaches as yet a small proportion of the working classes.

An interesting chapter describes the authorities by which technical teaching is controlled, and France appears to have suffered in the past from the clashing of rival authorities. Two further chapters are devoted to the various schools providing for the naval and mercantile service and to the arrangements for technical teaching of household economy. The subject of the third section of the book is Technical Education in Foreign Countries. Most of them are treated briefly, fullest consideration being given to Germany, Switzerland, and the United States. It is interesting to learn that in the view of a competent foreign observer, technical teaching in England "has expanded and permeated every branch of industry and commerce in a truly marvellous way." He also pays a tribute to the value of the work done by private enterprise, to which he states our chief technical institutions are due.

The book is provided with a number of appendices; but the Table of Contents would be more useful if the paging were correct, which it is not. Our great regret is that M. Dubief could not see his way to a more detailed description of the methods of teaching and working in individual trades, in order that this side of the subject might be as thoroughly dealt with as are the technical schools themselves.

The Shifting and Incidence of Taxation. By E. R. A. SELIGMAN.
(New York: The Columbia University Press. 1910.
Pp. 427)

It is eleven years since the second edition of this standard work was reviewed in the *ECONOMIC JOURNAL* (Vol. IX., p. 240), and a third and enlarged edition, possessing all the merits which we are accustomed to find in the author's contributions to economics, comes opportunely when problems of taxation are unusually prominent in a number of countries.

The history of the theories of incidence, which occupies half the volume, has been enriched by the inclusion of a few early writers who have hitherto been overlooked even by the author himself, and this portion may be accepted as a most authoritative and thorough survey of the literature of the subject. There can now be few, if any, important omissions, and we have discovered only one slight error. Among the writers included for the first time importance is assigned to Andrew Hamilton, who published anonymously in 1790 *An Inquiry into the Principles of Taxation*, and whom Professor Seligman describes as "a professor at Aberdeen." There never was a professor of that name in Aberdeen. Robert Hamilton, author of *An Inquiry into the National Debt*, was a professor there at that time, but the work has never been attributed to him.

In the author's own theory of incidence a number of changes have been made and some chapters have been wholly re-written. The part dealing with terminology has been expanded to four times its former length, a number of new distinctions and terms being introduced in the hope that they will "be deemed worthy of acceptance as the definitive nomenclature." Where the burden of a tax is greater than its yield, Professor Seligman insists upon cutting up the burden, and the extra loss is not incidence but "the pressure of incidence," "the pressure of the impact," or "the pressure of evasion." The "transformation of taxation," where the producer pays the tax and recoups himself by improving the process of production, is not very happily classified as a form of "escape from taxation."

The only noteworthy change in the excellent chapter on general principles is the abandonment of a theory which the author has found to be untenable. In the earlier edition it was argued that in the case of monopoly less of the tax on the product would be shifted to the consumer if the industry obeyed the law of increasing returns than if it obeyed the law of constant returns,

while more would be shifted if it obeyed the law of diminishing returns. Under competition these would be reversed. In deference to the criticisms of Professor Edgeworth (*ECONOMIC JOURNAL*, IX., 293-302), this theory has now been dropped, and the author tells us that in the case of monopoly "the influence of diminishing and increasing returns is apt to be similar to that in the case of competition." In both cases, if the commodity is subject to increasing returns, the tendency is that more of the tax will be shifted to the consumer than under circumstances of constant or diminishing returns. It would have been a fitting acknowledgment of services rendered in this matter if Professor Seligman had toned down his strictures on the mathematical method still appearing under the unfortunate title of "The Mathematical Theory," which is apt to suggest a distinct doctrine of incidence where none exists.

The discussions of taxes on agricultural land and on urban real estate have been largely re-written, and most of the recent works on English local rating have been utilised to good purpose. Professor Seligman adheres to his former conclusions in this department, and they are set forth with even greater lucidity than formerly. The student of local finance will find here in brief compass one of the most stimulating discussions of the incidence of rates with which we are acquainted; and if attention is called to a few of the doctrines with which we are inclined to quarrel, it is due rather to the importance of the volume than to any serious disagreement with most of the conclusions of the author. One of these disputable points arises where Professor Seligman discusses the defects of the ordinary view that taxes on agricultural rents fall on the landowner. Among reasons for questioning it he tells us that rents are not always truly competitive, and when farmers are under-rented "a remission of rates will inure to the advantage of the tenant," and an increase of rates will be borne by the tenant until the margin between actual and rack-rent is exhausted. He adds, however, that the recent depression in England has not only destroyed this margin, "but in many cases created a margin on the other side"; and when farmers are thus over-rented "a remission of rates will be of all the greater advantage to the tenant." "This, surely, is a paradox which requires more proof than is here offered. The truth appears to be that when agricultural prices are falling, rent does not fall as quickly, but follows some little way behind, the result of the remission being to prevent rents from falling as far as they otherwise would have done. Also when he asserts that the principle of capitalisa-

tion of taxes holds good of urban lands, but questions it in reference to agricultural lands because the latter are exposed to sharper changes of value, one very much doubts the accuracy of the view.

Still less convincing are his arguments for the inelasticity of the demand for house-accommodation. When he urges that the tenants "will raise money to pay the increased rent by such expedients as taking in lodgers," it may be asked where these lodgers were before the tax was imposed. Presumably they had house-accommodation somewhere; and if taxation forces a man to let off part of his accommodation to another, is it not just one way of reducing his own demand? When his blanket had shrunk the Irishman thought to lengthen it by cutting a strip from the top and sewing it on the bottom. How does it improve matters when the demand for house-room shrinks because of high rates if Mrs. Smith's lodger removes to the apartments of Mrs. Harris? The latter may be enabled to keep as large a house as before by sharing it; but the former, losing the lodger's contributions and having to pay higher rates, will be the more likely to seek a smaller house. For the theory of Professor Seligman it is necessary that the tax should create a new supply of lodgers who have not previously had any accommodation; for only the inhabitants of St. Kilda, who earn a precarious livelihood by taking in one another's washing, would try to meet higher rents by lodging one another's children.

Nor is the surrender of accommodation so uncommon as the author thinks. It has been distinctly noted in a representative town as an effect of recent depression that quite a large proportion of working-class tenants have reduced the number of rooms they occupied. The fact that houses are necessities is not inconsistent with elasticity of demand for house-room, for there are sufficient people who would take more of it if the rent and rates were lower, or who would have taken more of it in the past if rates had not existed, to make an assumption of inelasticity inappropriate in considering the effects of taxation. When Professor Seligman further says of "the tenants in the slums of large cities" that "they shrink from the expense of moving from apartment to apartment," we wonder if he can offer any support for the statement. For four years the present reviewer kept a record of the occupants of a number of blocks of tenements of one- and two-roomed houses in Glasgow, and nothing was more striking than their mobility and the inexpensiveness of their removals. Only 12 per cent. of the houses were occupied by the same persons from beginning to end of the period, and many of them had a

very rapid succession of tenants. For the most part the expense of removal meant nothing more than the hire of a hand-cart, sometimes not even that.

STANLEY H. TURNER

The Law and Practice of Rating and Assessment. By CLARENCE A. WEBB. (London: Crosby Lockwood and Son. Pp. xxi+236.)

MR. WEBB may be congratulated on having carried out with success a difficult piece of work. He has set himself the task of explaining to overseers, surveyors, and members of assessment committees the law and practice of rating and assessment. Few subjects are less amenable to brief treatment. Confused by the varying practices of the rating authorities, perplexed by a difference of law and procedure in the Metropolis and in the country outside, flung into a condition of puzzled bewilderment by the, if one may venture to say so, conflicting decisions of judges of the High Court, which must be assumed to be in accord, the ordinary reader is apt to despair of gaining any clear insight into the rating problem. He sees his assessment raised, he knows not why; he would like to protest effectively, but is ignorant how to make such protest effective; and finally subsides into a state of grumbling but passive acquiescence in the doings of an authority which appear beyond the limits of the normal human understanding.

Now, we do not say that Mr. Webb makes all things perfectly clear: the subject does not admit of perfect clearness. But he does contrive in commendably small space to explain the general principles of the law. As the rating problem is bound up with local government, he gives a brief history of the rise and development of the rating authority; but apart from this very necessary excursion he confines himself closely to the actual subject. Here and there he allows himself to criticise anomalies, but is too wise to add to his exposition of the method of rating proposals for its reform.

The book begins with a statement of what may or may not be rated. The author next tells us what are the rating powers of local authorities. He then proceeds to show us how the valuation lists are made inside and outside London. We learn the difference between "Gross and Rateable Value," that thicket of tangled inconsistencies. Following on this comes a discussion of who may object to the assessment and how he may do so. The information given on this last question is full and exhaustive,

but he might have made the explanation more telling if he had taken the ordinary ratepayer aggrieved on account of his assessment, and conducted him in narrative form through the different stages of appeal. All the facts are given, but the story of a typical ratepayer pushing his objections to the furthest extreme would have lent point to the exposition.

The last portion of the volume is concerned with an account of the different kinds of property which are rated and the principles of assessment applicable in each case. House and flats, machinery and business premises, woods and sporting rights, railways, gas, water, and tramway undertakings, and even licensed premises, have all a special chapter devoted to themselves. Throughout the author steers a middle course, avoiding on the one hand the interminable intricacies of legal decisions and on the other the misleading simplicity of a purely popular explanation.

REGINALD A. BRAY

Studies in Indian Economics. By PROF. H. B. LEES SMITH, M.P. (Constable and Co. Price 3s. 6d.)

INDIAN ECONOMICS has been a field little surveyed yet. Mr. Ranado's *Essays in Indian Economics*, admirable as they are, are a group of essays on various subjects, more or less detached surveys of some portions of Indian economics. Professor Lees Smith's *Studies in Indian Economics* is something more than a survey of Indian industries and commerce. He uses as the basis of his studies not merely the existing industries, but takes into account the resources that could be utilised, natural wealth, and national aptitudes, the motive power of organised credit, and such other important factors, and therefore casts an eye into the future.

He devotes a preliminary lecture to a general survey of the Indian economic situation; the exclusive dependence of the country on the one precarious resource of agriculture, and its need for a greater diversity of industry. In the very beginning he gives a useful warning to the people of the country when he points out the danger of blindly following the English economists in dealing with India, which is so different from England. A change is certainly needed in the economic condition of India. But it must be a change, not on exotic lines, but on lines natural to the country, its peoples and its conditions. The author gives an elaborate survey of the existing conditions, the industries of

the country, their possible extensions and lines of improvement. The natural resources of the country are such as could ensure a healthy diversity of industry. But the one great cause of the whole economic backwardness of the country lies in the old-fashioned methods of production. But for the cotton and jute industries, it cannot be denied that primitive methods still hold the field. Home-work, and not production on a large scale, is still the prevailing system.

The author discusses the subject of the *Swadeshi* and Indian Protectionism, which is dealt with more at length in his other book on *India and the Tariff Problem*. He examines the Indian banking system, and advises the formation of a central bank for India or the amalgamation of the three Presidency banks. With regard to the general indebtedness of the Indian ryot, which is almost becoming proverbial, he considers the only way out of it is the formation on an extensive scale of co-operative credit societies, organisations that combine the elasticity of the private money-lenders with the cheapness of Government banking. The bulk of the people of India consist of just those classes among whom the societies have done successful work in Europe. Moreover, as the author rightly considers, it is institutions like these that will have a great effect in the political world as well. They provide experience in the conduct of self-governing institutions, experience that will give the people qualities needed for representative government, for which they have begun to ask. The last note that Professor Lees Smith sounds is striking. He refers to some of the fine qualities of the Indian peoples, but what are still needed are confidence and enterprise. Without mutual trust, co-operation is impossible. Without enterprise, development is extremely slow. The people need to do things for themselves instead of always depending on the Government. Lack of initiative, conservatism in methods, want of technical and commercial training—these have been serious factors retarding Indian development. But if they can be overcome, Indian industry and commerce are bound to play a great part in the economic world.

N. M. MUZUMDAR

Tariff Reform. By CAPTAIN G. C. TRYON, M.P. (London : The National Review. 1909. Pp. 139. Price 2s. 6d. net.)

THIS little book admirably fills a gap in the literature of the Tariff Controversy. The movement has produced some books of quite exceptional merit; but not, so far, a really good short text-

book, suited to the ordinary reader. Most nearly approaching this are Professor Ashley's "Tariff Problem" and Mr. Amery's "Fundamental Fallacies of Free Trade"; but these very able books appealed to a more instructed public. Captain Tryon, however, has written a book that the most uninstructed person can understand, and at the same time bases his reasoning on such sound lines as to satisfy the severest economist.

Ought our government to stand aside as foreign nations increasingly interfere in our trade? America penalises our shipping, in which Captain Tryon rightly points to our natural advantage. It refuses our china and welcomes our china clay, whilst Germany regulates in her own interest our export of woollens. On the other hand, manufactured goods form an "unnaturally large part of our imports," with the added fear of systematic dumping. In the past our woollen and cotton trades were acclimatised by Protection, and it established our shipping supremacy; facts which do not prove free trade bad now, but show Protection to have been beneficial in the past.

Cobden miscalculated in many ways, and overlooked the tendency of "excessive concentration" of industry under universal Free Trade to accentuate trade depressions and to give individual nations a dangerous monopoly of foodstuffs and raw materials. So Free Trade and Nationality are hopelessly at conflict. By the test of industrial production, Free Trade stands condemned. The more rapid growth of younger nations cannot explain away "a German steel industry nearly twice as great as our own," and Germany can keep her population at home: England cannot. The error is to look at foreign trade statistics alone: for a growth of foreign trade may mean a loss. An English trade is destroyed by foreign importation, which is paid for by an export of goods formerly consumed at home; and where there were two English industries, there is now only one. "In short, a change to some foreign source of supplies is mistaken for an increase in total consumption; we get bigger returns both of 'trade' and 'unemployment.'"

Moreover, tariff negotiations are likely to go more against us in the future, the open door having actually increased the stringency of foreign Protectionism. The "favoured nation clause" has proved illusory, concessions being limited to articles from which England cannot benefit, or special restrictions shutting her out. Finally, foreign countries are continually fencing off the neutral markets for their own privileged trading.

The greatest advantage to the Protectionist country, however,

is the double market, especially with the modern development of machinery. For control of the home market and power to dump in England makes possible the increased scale of production that is the vital factor, and in times of depression saves the foreign, at the expense of the British, workmen. Canada and the United States, before and after the imposition of the Canadian Tariff, afford a striking analogy. Moreover, Protectionist countries, far from clinging to obsolete methods, get the best British machinery and skill for their factories, and the "bracing atmosphere" of Free Trade means an uncertainty fatal to all enterprise. Abroad protectionism is becoming more stringent, and the neutral areas fewer. Only the British Empire remains, and there the prospects are more than hopeful and are not confined to the existing preference, valuable as that is shown to be. Finally, all systems have food taxes, and Tariff Reform means at most a transference, more probably a decrease. Final chapters deal with the opposition to Tariff Reform, Defence, and Imperial Preference as a Bond of Union.

Such in barest outline are the lines of Captain Tryon's argument, and the book is almost everything a short text-book should be. The style is clear and easy, the arrangement admirable, and the argument develops naturally, steering a middle course between unsupported assertion and an over-dose of statistics. Throughout taste and temper are unexceptionable, and the humour rapier-like both in keenness and refinement. Captain Tryon, indeed, reminds us of "Aramis raising his hat with one hand and drawing his sword with the other."

N. B. DEARLE

Théorie de l'impôt progressif. Par LOUIS SURET. (Paris : Félix Alcan. 1910. Pp. 774.)

THIS ponderous volume surveys all the theories of progressive taxation which have ever been put forward, and all the objections which have ever been made to them. Despite its bulk, it attempts to deal only with the theoretical side of the subject, seeking an answer to the question whether or not such taxation is justified by ethical or other principles, and avoiding altogether the study of the application of progression in existing financial systems. Indeed, when M. Suret does occasionally cite an actual tax by way of illustrating his terminology, he shows no great familiarity with present practice. Thus, as an example of a tax "at the same time proportional and progressive," he mentions "the exist-

ing income-tax in England," where the proportional rate applies to incomes above £500; but this has not been the case since 1898.

The theories are, however, brought together in six long chapters replete with quotations from all manner of writers, many of them scarcely worth the attention they receive, and impressing the reader with a sense of wearisome elaboration. If M. Suret had not been so ambitious of attaining completeness within the limits of his inquiry, a few hundred pages might easily have been saved by cross references to Professor Seligman's *Progressive Taxation*, which has been translated into French. Similarly, when a score or more authors, important and unimportant, have in much the same words urged the same objections to a theory, it is hardly necessary to quote in the text page after page from every one of them and then to repeat in lengthy footnotes the very same words in the original tongue of the particular writer. As a result, it can truly be said that this volume is the fullest collection of statements and opinions of previous writers which we have seen, for it is more elaborate and detailed than even Professor Seligman's monograph; and it must also be granted that the arrangement and classification of authors are admirably done. But it would have been much more readable, without sacrificing anything of value, if there had been more condensation and judicious omission, though it is doubtless easier to produce a big work on such a topic than a small one. Yet it would be a pity if these defects obscured the real merits of a book which displays not merely erudition, but occasional passages of keen criticism and independent judgment. The "socio-political" view is discussed with somewhat greater sympathy than writers generally accord to it; and a chapter is devoted to theories which are not based on the idea of justice, particular reference being made to that of Professor Loria. The conclusion is not, however, very illuminating.

STANLEY H. TURNER

Histoire des doctrines sur l'impôt en France. Les origines et les destinées de la Dixme. Royale de Vauban. Par J. B. M. VIGNES. (Paris: Giard. 1909. Pp. 525.)

PROBABLY no country has been more fortunate than France as regards the attention devoted to the history of its financial doctrines and practice, and this lucid work well maintains the high reputation of French economists in this department of study.

The aim of Professor Vignes is not to present an ordinary critical analysis of the celebrated *Dîme Royale* of Vauban, but to investigate the origins of the leading ideas of that work and to estimate their influence on subsequent doctrines and practice. Hence the book deals with the growth or decay of the three fundamental principles of Vauban : that taxes on land should be proportional to the gross produce and payable in kind ; that direct taxes, at least, should be "rated" (*impôts de quotité*) and not "apportioned" (*impôts de répartition*) ; and that taxation should be universal. The volume consists of three parts, devoted respectively to these doctrines, and each part is subdivided into two chapters, the first of which deals with the origins of the idea and the second with its destiny. Such a scheme obviously involves a very thorough survey of the history of theory and practice, and the two are woven together with conspicuous success, and, so far as we can judge, with historical accuracy. The references to other countries are, it is true, very slight, and little would have been lost if they had been omitted altogether. But the selection of Vauban as a starting-point from which to work backward and forward in the development of these ideas of taxation in France is justified by the result.

M. Vignes has no difficulty in showing that for each of the principles Vauban had many precursors. The proposal to levy the *impôt foncier* on the gross produce and make it payable in kind, which is usually considered to belong most distinctively to him and which gave the title to his book, was not first discovered by him. M. Vignes does not, however, agree with those who affirm that he borrowed it from Boisguilbert, but gives some very strong arguments for the view that it was taken from the writings of Hay du Chastelet, an intrepid thinker who has not hitherto received his due from economic historians. Certainly Hay du Chastelet had expressed the principle, and it is difficult to believe that Vauban was not acquainted with his publication. The doctrine of rated taxation is also stated by the same writer, but it had been applied still earlier in practice, and many authors before these had called for its general adoption. As to the maxim of universality, it appears to have been the rule at one time, and the majority of economists before Vauban had protested against fiscal privileges and exemptions.

But while none of the three cardinal principles originated with Vauban, he put his own impress so strongly upon them that they owe their influence in large measure to him. Taxation in kind, of course, died out for reasons which the author adduces ; but

the other two propositions were destined to play a vital part in fiscal development. The principle of the *impôt de quotité* was applied in the *Dixième* of 1710, and maintained later in the *Vingtième*. *Répartition* found a new lease of life at the end of the eighteenth century because, though employed so long to oppress the taxpayers, a system of fixed quotas when the figure could not be raised served for a time as a popular defence against royal abuse. But the reasons were transient, and the system advocated by Vauban obtained a stronger hold in practice, promising to triumph completely in the future. As for the principle of universality, the history of the personal and territorial privileges and exemptions, the arguments for and against them, the struggle of the privileged to retain their advantages down to the very end of the *Ancien Régime*, and the *coup de force* of 1789, occupy three-fifths of the volume and permit of no summary brief enough for a review. The whole work is admirably written, displaying a wealth of information so well arranged and clearly expressed that it never becomes dull. Within the limits set for himself, M. Vignes shows a mastery and penetration which cannot fail to obtain for his volume a high place among works on the financial history of France.

STANLEY H. TURNER

Stock Exchange Investments in Theory and Practice. By JOSEPH BURN. (London: C. and E. Layton. Pp. 322.)

THIS book, which consists of a series of twelve lectures delivered by the author at the Institute of Actuaries, in the session 1908-9, is primarily intended for the use of students preparing for the second examination of the Institute, the syllabus of which includes, *inter alia*, the constitution and operations of the Bank of England; the National and Local debts of the United Kingdom; and the principal classes of Stock Exchange Securities, and practical questions arising in connection with their purchase and sale. Although written in the first place for the benefit of a limited class, it will be readily seen that the work, if it deals adequately with its subject, will appeal to a much wider circle of readers, and perusal shows that it deserves a large circulation among persons other than those engaged in life assurance.

As is necessarily the case with any work containing a description of the Bank of England and the National Debt, the book contains a good deal of historical matter, which is set forth in an attractive manner. The first three lectures deal with the constitu-

tion and operations of the Bank of England, which are fully described, and they are sufficiently up-to-date to include an explanation of the American crisis of 1907 and its effect on the London market. Lectures IV. to VI. deal with the National Debt clearly and in detail, and furnish interesting reading for the novice. The second half of the book appears to be the more useful although not, perhaps, so attractive as the earlier part. Lectures VII. to X. are devoted to the subject of Stock Exchange securities, and describe fully Stock Exchange practice in regard to the buying and selling of stocks and bonds, including technical points relating to contango and backwardation, &c. The different kinds of investments are described at length in Lecture XI., which is devoted to the securities appearing in the Stock Exchange daily official list, and the information given is of the utmost service to those who have little or no acquaintance with the list.

The last lecture, on local indebtedness, gives in a comparatively small space a useful account of a subject upon which it is not easy to obtain information, and deals with the various statutory powers enabling local authorities to borrow, and the various points to be considered by a prospective lender before making an advance.

The book is evidently the work of a man with an exceptionally wide experience in financial matters, and it must be conceded that the author has succeeded in his endeavour to "give sufficient information to enable anyone to read the Stock Exchange and Money Market columns of the daily papers with intelligence and advantage." Facsimiles of various forms in actual use are given, and a good index adds to the value of the book as a work of reference.

T. TINNER

Beteiligungs- und Finanzierungs-gesellschaften. Von PROFESSOR DR. ROBERT LIEFMANN. (Jena: Gustav Fischer. 1909. Pp. x + 495.)

PROFESSOR LIEFMANN is so well known for his excellent work that a new book by him scarcely requires recommendation. This time he considers, and considers very fully, those companies in Germany, America, England, Belgium, France, and Switzerland which are formed for the purpose of co-operative investments and kindred purposes. He breaks comparatively new ground here, and this applies to his theory as well as to his descriptive portions.

English readers will turn with interest to his account of the rise and progress of such companies in this country. Why did they arise at all? The answer is that investors, especially small investors, wanted a high return for their capital. Sound securities (such as Consols) paid only a small dividend; foreign securities paid a greater. But then the risk was greater too. Now a big capitalist, by a judicious selection of his investments, could minimise the risk. Not so the small investor. But the latter might co-operate with other small investors for this purpose. Hence arose Investment Trusts. The first of these in England was the Scottish-American Investment Company, founded in 1860, with a capital of £2,000,000. The number of such companies increased gradually, and Professor Liefmann gives a list of no fewer than 107, the latest being the General Investors and Trustees, Ltd., founded in 1907, with an authorised capital of £1,000,000 sterling.

Kindred companies to these are the Assets Companies, whose object it is to take over the property of bankrupt concerns. The first of these was founded in 1882, the Assets Company, in connection with the financial crash of the City of Glasgow Bank. In 1883 the Assets Realisation Company was founded, not in connection with some particular bankrupt concern, but to deal generally with bankrupt businesses. Lastly, there are the Reversionary Companies, whose object is to purchase "reversionary interests on founded property or in railway and other approved securities, sterling loans, and pecuniary legacies, also reversionary interests in freehold or copyhold property."

Professor Liefmann is most informing on the subject, and is very thorough for each of the countries with which he deals. If his descriptive portion is interesting, no less so are his theoretic speculations. He divides capital into three sorts: (1) Capital in kind; (2) capital in money; and (3) capital in stock. To the third he gives a good deal of attention, for it is the starting-point for the consideration of the Investment Companies.

In his last section he deals with such topics as the regulation of these companies and their relation to the banking houses. In short, no aspect of the question is neglected, and students will find Professor Liefmann's book a mine of information on a comparatively new subject.

M. EPSTEIN

Lebensbedingungen moderner Kultur. Von DR. GUSTAF F. STEFFEN. (Jena : Gustav Fischer. 1909. Pp. iv+372.)

DR. STEFFEN has had a varied career. His first studies were those in chemistry ; his later studies in social and economic life. For ten years (from 1887 to 1897) he was newspaper correspondent in London, and during that time he made himself acquainted with industrial conditions in this country, and published an excellent book on the English wage-earning class. He is now Professor of Economics at the tiny University of Göttenburg, and his latest work contains eight essays on sociological and economic questions. The book was written in Swedish, and a word of thanks is due to Margarethe Langfeldt, who translated the book into German, and so made it accessible to a wider circle of readers.

In his first paper, on the Meaning of Life, Dr. Steffen discourses pleasantly on such questions as the rise of social classes, progress, and civilisation. We might describe this first paper as a philosophy of democracy. The author has strong sympathies with democracy : nay, we believe that he inclines very strongly to Socialism. He certainly accepts the view that economic forces are the motive forces in history, and he maintains (in the second paper on the Struggle for Well-being) that poverty is an evil. He has some biting things to say on the view prevalent in some quarters that poverty is good ; that the poor have only themselves to blame ; or that there must of necessity be rich and poor in the land. Dr. Steffen will not hear of this. A people which is held captive by force of habit, which cares only to maintain things as they are, which has no longing for better conditions — such a people, he says, is in a state of decay. The question of poverty interests the author greatly, and he discusses it from all sides. What he deplors most is the toleration of poverty. He would like to see the poor utterly dissatisfied with their conditions, and the rich utterly dissatisfied to live in a society that contains poor elements. Indeed, his chapter on social discontent is one of the best in the book.

One sees clearly that Dr. Steffen is deeply concerned for the social wrongs of our time, and he is unsparing in his criticism. Thus, he points out the hypocrisy of the modern sentiment that all work is noble. In reality (he says) it is only the work of the ruling classes that is so considered. One is not surprised to find that he dislikes luxury. He has some excellent things in the section devoted to the consideration of the subject. "Luxury is

the expenditure of much in the way of material things without bringing about higher social values." And therefore, he concludes, we cannot wage war against poverty, or raise the standard of life, without at the same time attacking riches and luxury.

In his section on Socialism and social democracy, Dr. Steffen gives as good an account of Socialism in a dozen pages as any we have ever read. There is a clear, concise presentation of the teachings of Marx and excellent criticisms on the weak points in his system.

We have said sufficient to show the aim of the book and the author's standpoint. All through he is most interesting, and the topics he discusses are of vital importance:—What is the State? Personal and economic freedom; the moral value of the State; the Labour question; the freedom of labour contracts; trade unions and their relation to Socialism; taxation policy. For the discussion of these subjects and for some valuable suggestions respecting education we must refer the reader to the book itself. It is a book that deserves more than passing attention, and, fortunately for the author, the German translation is quite easy reading.

M. EPSTEIN

Technisch-volkswirtschaftliche Monographien. Herausgegeben von PROFESSOR DR. LUDWIG SINZHEIMER.

Band v. : *Die volkswirtschaftliche Bedeutung der technischen Entwicklung der Zelluloidindustrie.* Von DR. JOSEF ERTEL. (Pp. 139. 3m. 50pf.)

Band vi. : *Die wirtschaftliche und soziale Entwicklung der deutschen Ziegelindustrie unter dem Einflusse der Technik.* Von DR. BRUNO HEINEMANN. (Pp. 139. 3m. 50pf.)

Band vii. : *Die volkswirtschaftliche Bedeutung der technischen Entwicklung der deutschen Wollindustrie.* Von DR. ALEXANDER WACHS. (Pp. 135. 3m.)

Band viii. : *Die volkswirtschaftliche Bedeutung der technischen Entwicklung in der Schuhindustrie.* Von DR. FRIEDRICH BEHÉ. (Pp. 148. 3m. 50pf.)

Band ix. : *Die volkswirtschaftliche Bedeutung der technischen Entwicklung in der Papierfabrikation.* Von DR. FRANZ SCHÄFER. (Pp. 284. 7m.)

Band x. : *Die volkswirtschaftliche Bedeutung der technischen Entwicklung der deutschen Lederin-*

dustrie. Von DR. JULIUS TRIER. (Pp. 91.
2m. 50pf.)

(Leipzig : Klinkhardt. 1909.)

THIS systematic series of trade monographs is a sign of the times. It is a fresh indication of the new direction now being taken in every country in economic studies, or—if one prefers so to put it—of the greater attention now being directed to certain parts of the economic field. Whether in the old or in the new universities, whether in the venerable faculties of philosophy and arts or in the brand new commercial faculties and colleges, the effort is visible on the part of professional economists to get into closer touch with the actualities of business life—to understand them, as it were, more from within, as they present themselves to those primarily concerned, and not simply from without, and as looked at by the politician or government official. Investigations into the growth and organisation of the several industries are a natural outcome of this new spirit. For it is coming to be realised that a great industry is, in a real sense, an organism, with a life of its own and with inter-related members, and that it can only properly be treated as a whole. The general and the particular will always each have a place in economic inquiry; and for teaching purposes, for obvious reasons, general considerations must necessarily preponderate. But the economist is finding it desirable to immerse himself from time to time in the particulars of a single trade, and to return to his necessary work of generalisation with a deepened sense of the limitations of abstraction.

Professor Sinzheimer, of Munich, must be congratulated on the circle of competent pupils whom he has been able to set to work. Each of the monographs now before us is a careful and informing piece of work; and each of them has sought, though with varying measures of success, to place himself at the point of view indicated by the editor. That point of view (which is varicously expressed in the titles of the several volumes) is the relation between the technical and the economic aspects of the several trades. That, also, is significant of the present trend of thought. Economics has hitherto found its allies chiefly in Philosophy and in History; but, in the age of machinery, it is inevitable that it should be brought into closer contact with Engineering and the Applied Sciences. To understand enough of the technical side of a business to interpret its economics, without being overwhelmed by technological detail, is a difficult ideal; but it is an ideal that the economist of to-day can hardly avoid aiming at.

An adequate review of the present volumes would demand

more space than is at my disposal, and what is even more necessary, more special knowledge. I must content myself with noticing a few points of interest.

Dr. Wachs' book on the woollen industry goes over ground that is perhaps rather more familiar than the others. We learn from it, *inter alia*, that the working day had been pretty generally reduced in practice from eleven to ten hours since 1897, even before the factory law of 1908 made ten hours the legal maximum for female operatives. Money wages also have gone up generally in the last few years, and have a good deal more than made up for the ground lost in the depression of 1901, though nothing is told as to the cost of living. The plan of joint agreement as to rates of piece wages is making progress, especially in districts devoted to a single branch of the trade.

Dr. Behr's "Shoe Industry" is very largely a comparison of the factory system of production on a large scale with the small shop methods which it is replacing, but replacing far more slowly than has been the case in America or England. The most original and instructive part of his treatise is an attempt to reckon the exact cost of production of a particular kind of shoe in a factory and in a small workshop. Another interesting section describes the various ways in which the large shoe manufacturers are trying to get hold of the market, and especially the plan of "Fabrik-filialen," or, as we should say, of "multiple stores."

"Papierfabrikation," by Dr. Schäfer, is, as might be expected, very largely an account of the new method of production from wood pulp and of its economic relations to rag paper. We learn a little also of the printing paper syndicate, but not so much as we could wish of its organisation and membership.

While the three industries hitherto mentioned are of long standing, the celluloid manufacture is very new, and dates only from 1869. In Germany it started as late as 1880, when an enterprising Mannheim manufacturer established a works and placed in it a number of operatives whom he had brought over, "um teures Geld," from the Franco-American factory at Stains, near St. Denis. At present there are only eight celluloid factories, all on a large scale, in Germany; and Dr. Ertel has no difficulty in showing the technical reasons why the celluloid manufacture can only be carried on upon a large scale, though the manufacture of celluloid goods can still be profitably undertaken by comparatively small concerns.

To the present reviewer, Dr. Heinemann's monograph on "Brickmaking" has proved the most fresh and instructive. Brick-

making in Germany is an industry in which the labour conditions are generally very deplorable, and that because it is a season trade. Owing to the method in which bricks have hitherto been generally made, with exposure at various stages to the open air, the work can only be carried on during the summer months (from April to October). As a consequence, it is not as a rule engaged in by labourers permanently residing on the spot, but by wandering bands of men who come from a distance for the season (or *Kampagne*). These men used to come chiefly from the small principality of Lippe-Detmold, and apparently they worked in more or less co-operative fraternities. But now the Lippe men can confine themselves to the more skilled or responsible part of the work; and the vastly larger number of labourers in the brickyards, rendered necessary by the growth of great towns and the demand for building bricks, is supplied by the immigration of foreigners—Russian Poles on the east, Czechs in Saxony, Walloons and Dutch on the west, Italians on the south. These imported labourers are under the thumb of the middleman (the *Baas*, i.e., “Boss”), who pays their travelling expenses and deducts them from their wages, contracts with the owner of the brickyard to produce a certain quantity at a certain price and makes what he can out of his foreign gang, and supplies them with food and drink on terms which recall the worst abuses of the truck system in England. Until the owner of the brickyard can give employment all the year round, it will be almost impossible for him to free himself, even if he desires to do so, from the middleman; and so long as a fresh set of men appear every year, the owner can feel little interest in their well-being, and governmental inspection can have but slight efficacy. Dr. Heinemann shows how the growth of great cities is creating a demand for bricks which makes an expensive equipment economically possible, and how the improvement in the means of transportation is widening to some extent the area of the available market, and enabling the larger concerns slowly to drive out the smaller ones. But any considerable improvement in labour conditions must be dependent, according to our author, on such a change in the methods of brickmaking as shall render the manufacture independent of the weather. The improvement of methods has indeed already gone so far as to make the work independent of the weather within the season, but not so far as to make the work continuous throughout the year. “Herein is the most important problem of modern brickmaking, which has already been solved so far as the invention of a process is concerned, but not in such a way that the

solution can be recommended from a purely business point of view." As far as I have observed, Dr. Heinemann does not deal with the question how far seasonal manufacture may be bound up with the seasonal demand for bricks : for, of course, building itself is a seasonal occupation.

Dr. Trier's "Lederindustrie," though one of the shortest, is also one of the best of the series. The tanning trade has undergone great changes in processes and great changes, also, in the sources from which it obtains its hides, and in the markets in which it disposes of its leather. All these developments are here explained in a brief and competent manner. Dr. Trier calls attention to the business consequences which flow from the facts that hides are by-products, and that their supply and price are in large measure independent of the demands of the leather market.

When a series offers us so much, it is perhaps a little ungenerous to ask for more. But I have been struck, in most of the monographs, by the extremely scanty information concerning the capitalistic side of the several industries : the capital invested, the owners, their organisation in firms, companies, syndicates, the movement of prices, the fluctuations of dividend, and financial policy generally. Such information is indeed very difficult to get : almost every preface laments the extreme reticence of the manufacturers. But in these days of joint stock companies there are means of getting a good deal of information about most businesses. The ideal monographer, it is clear, should be not only an Economist and a "Techniker," but also an Accountant ! But I doubt whether the profession of Accountant has sufficiently progressed in Germany to make this proposition as intelligible there as it is becoming with us in England.

W. J. ASHLEY

Chemical Industry on the Continent. A Report. By HAROLD BARON, Gartside Scholar. (Manchester : At the University Press, 1909. Pp. xi + 72.)

THIS, like several of the preceding Gartside Reports, is mainly of a technological character. The writer gives a straightforward account of the processes he found in operation in the works to which he was able to gain admission in Belgium, Northern France, and Western Germany ; and this part of his modest volume ought to prove suggestive to those engaged in chemical and dyeing undertakings in this country. Of more general interest

is the concluding chapter on Patent Protection. According to Mr. Baron, the German Patent Office makes a much more thorough search as to the originality of an invention than the British Office, and charges only a quarter of the British fee. Accordingly, "it is a frequent practice among inventors in this country who file many applications for patents to first file the application in Germany, in order to get the benefit of the search, and, if the reply is favourable, to then file the application in England and other countries, claiming the priority of the German application under the International Convention." Not only is the search more thorough, but the German practice also gives greater opportunity to the public—i.e., to rival manufacturers—to oppose the grant. "The result is that a patent, when ultimately granted in Germany, represents an asset of more real value to the owner. In case of infringements, he can sue with greater confidence of success than is the case with an English patent."

Mr. Baron seems to have no doubt at all in his mind about the Patents and Designs Act of 1907. "There are already indications that the German colour manufacturers are taking steps to erect works in this country in order to comply with its provisions"; elsewhere it is mentioned that the Bayer Company, of Elberfeld, are already erecting works at Port Sunlight (p. 47). "This cannot fail to improve employment in this country, *owing to the introduction of foreign capital.*" Apparently Mr. Baron is not one of those who believe that all a government can do by its legislation is to "divert" a portion of a given amount of domestic capital from one employment to another less profitable. Nor does he seem to be troubled by the reflection that the chemicals "made in England" will probably be, for a time, more expensive to the English consumer than if they had continued to be made in Germany. And it has apparently not yet occurred to him to worry about the proposition that when imports are diminished (e.g., of German-made chemicals), English exports inevitably fall off in like proportion!

W. J. ASHLEY

The Origin, the Organisation, and the Location of the Staple of England. By ADALINE L. JENCKES. (Doctorate Thesis of the University of Pennsylvania. Philadelphia. 1908. Pp. 83.)

THE conception of the Staplers presented in this work is the usual one. They existed largely for the advantage of the English

Government, and Governmental connection dominated their early career. The origin of the Merchants of the Staple is said to be connected with the King's merchants selling the King's wool. No examples of merchants selling the King's wool, however, are given previous to 1341, whilst there seems to have been a staple about the middle of the thirteenth century, and a Mayor and Merchants of the Staple in the reign of Edward II. If the proposed origin is correct, the word "staple" may be connected not with "stapel," a heap, but with "stapen," to go or to force to go, referring to the King's forcing merchants selling his wool to go to one specific port. The whole explanation, though an improvement on some that have been given, is not a demonstrated fact as it stands, but an interesting hypothesis. The origin of the Staplers remains unknown.

An appendix of twenty pages of documents enhances the value of the work, though only two of them have not been previously published—the Charters of 1561 and 1617. It is very much to be regretted that no use has been made of the MS. sources to be found in the Chancery Files and in the Rolls of the Staple. The Continental archives also might be expected to offer a store of materials. The discussion of the judicial relations between the officers of the Staple and the Chancery is hardly complete without at least a reference to the means taken by the Staple court for the recovery of debts in case the debtors had left the jurisdiction of the Staple. The Chancery Files supply abundant evidence of the sending of certificates and recognisances to the Chancery for the collection of debts in such cases.

There are some statements which may well be doubted and which require further investigation—for example, that the exportation of wool in the period 1353–1463 was as a rule in the hands of aliens. The valuable table showing the location of the Staple (1285–1617) contains at least one error. The Staple was not restored to Calais, after its removal to England in 1369, in answer to the petition of the Commons in the year 1373, but put off till 1376. Though there is a lack of exhaustive treatment of various interesting topics touched upon, the treatise as a whole may be said to be the most valuable that has yet appeared on the subject, and as a compact statement of certain features of staple organisation, useful to the student of English economic history. The broader treatment of the Merchants of the Staple, their trade organisation both in England and on the Continent, and the development of the merchant class handling staple com-

modities, within as well as without the fold of the Company of Staplers, however, still remains to be undertaken.

N. S. B. GRAS

Social England in the Fifteenth Century. By A. ABRAM.
(London : G. Routledge and Sons. 1909.)

THE subject chosen by Miss Abram for the thesis submitted for the degree of D.Sc. (Economics) in London is an ambitious one, including as it does an examination into the many changes of a period of transition from mediæval to modern conditions. And it is impossible to feel that we are much nearer to a final conclusion as to some of the problems which confront the student of fifteenth-century history, when we rise from the perusal of a book which bears evidence of unwearied industry upon every page. Concentration upon one aspect or another might have been more productive of fresh contributions to such knowledge as we possess of the economic and social life of a difficult period. The earlier portion of the volume embodies the conclusions of earlier investigators as to the course of financial, industrial, agrarian, and commercial changes in England, and to their results Miss Abram adds further illustrations drawn from the *Calendar of French Rolls*, the *Early Chancery Proceedings*, and other documents preserved in the Record Office. In estimating the effects of these changes upon social life and national character the writer draws attention to many interesting facts drawn from contemporary sources. Those concerned with such matters as the standard of comfort, the labour problem, the industrial position of women, the economic position of the Church, and the education of children, will find useful material, though their conclusions upon these points may sometimes differ from those drawn by Miss Abram. Here and there a tendency to generalise upon very scanty evidence is noticeable, and the form of the thesis leaves something to be desired. The constant mention of authorities in the text is not only tedious but quite unnecessary, since adequate references are supplied in elaborate footnotes.

E. A. MCARTHUR

Deutsche Wirtschaftsgeschichte bis zum Schluss der Karolingerperiode. Von KARL THEODOR VON INAMA-STERNEGG. Zweite verbesserte und vermehrte Auflage. (Leipzig : Duncker und Humblot. 1909. Pp. 755. Price 20mks.)

THE economists of many schools and countries who were recently lamenting the loss of Professor von Inama-Sternegg will

be glad to learn that he had found time amidst his many activities to revise and enlarge the first volume of his history, which, with its two hundred pages of additional matter, its ample references to original authorities, and its discussion of more recent researches, is likely to retain its position as the one accessible and adequate account of German scholarship in what is perhaps the most controversial of its many fields of activity. The first edition of this volume in 1879 opened up the way in Germany, as the work of Dr. Cunningham was shortly after to do in England, for the separate study of economic history as a whole. Since then an immense amount of learning has been devoted to the subject, and of this a great part—many economists and even some historians are apt to think a disproportionate part—has been concerned with the primitive agrarian conditions that form the starting-point of our civilisation. The fascination exercised by these problems will not be denied by anyone who has approached them, and the dissatisfaction of outsiders is mainly due to the feeling that the scantiness of the data gives free play to preconceived ideas, and that thus, through a mistaken notion of the causal importance of origins, the exorcised spirit of dogmatism re-enters the swept and garnished house of historical science. To some extent this reproach is being removed. The lore of the constitutionalist and the jurist is being balanced by that of the archæologist, the anthropologist, the philologist, and the geographer. One specialist approaches the early Germans through the study of their place names, another through that of their geodetic survivals, a third and fourth through the investigation of their currencies and their tomb furniture; and each of these methods of research tends to supply a basis for new theories as to the social origins of modern civilisation. Such a competition of origins is healthy and stimulating. As one scholar after another succeeds in establishing the importance of the period or the institution or the class interest which he champions, whilst none succeeds in establishing its all-importance, the social historian is confronted with the full height of his task—is compelled to enlarge his notion of the secular development, and at the same time to recognise that every period has an underived vitality and character of its own.

Although von Inama-Sternegg was by no means wanting in this catholicity of spirit, there is no doubt that in this first volume his interest was largely centred in an institution and a period which he had made peculiarly his own. He had laid the foundations of his work as an economic historian by a special study of

the development of landlordism in the Carolingian period, in which he was led to emphasise the primary importance of purely economic forces in the formation of feudal institutions. It was the pressure of economic needs on a settled and growing population rather than any external force that destroyed the isolated self-sufficiency of communities in which the small freeman was still the dominating figure. The *precaria* and the *beneficium* which facilitated the growth of dependent tenures, and the lay and ecclesiastical immunities which strengthened the organising initiative of landlordship, are primarily to be regarded as the instruments of this economic necessity. Setting out from this standpoint, von Inama-Sternegg had traced the rapid appropriation during the eighth and ninth centuries by monastic houses and lay magnates of the uncultivated soil that lay between the "marks" of the communities, the assignment of it under dependent tenures, and the reaction of this process on the status of free landholding in the communities themselves.

The account of the economic changes by which the freeman was subordinated to a higher social and political structure supplies a backbone to the present volume. It has been strengthened by the results of more recent research, especially by those embodied in the work of Dr. Rübel, whose view that the colonisation of the waste was mainly due to the systematic policy of the Frankish monarchy has been largely adopted, though it must be added that von Inama-Sternegg distinctly rejects Rübel's attribution of much constitutional and social framework (the hundreds, the "Hufen," &c.) to the centralising activities of the same epoch.

Criticism is not likely to assail the facts that form the basis of this account of the Carolingian epoch, but will more probably concern itself with their relation to other facts and their proportionate importance. Even those who think it a sound method to give the primacy to economic causes may well doubt whether those causes can have operated at so early a period with so little friction. The main difficulty of the economic historian is to find a formula of development that is slow enough to leave room for twenty centuries of progressive civilisation. The growth of landlordism, the displacement of an older by a newer order of nobility, of a local economy by a national economy, are phases of development that might be predicated of the eighteenth century, or the sixteenth, or the twelfth as well as of the eighth, yet the free peasant and the local economy are still far from extinct. We need not, therefore, be surprised if one group of scholars (Knapp, Wittich) find landlords among the Germans in the earlier cen-

turies of our era, whilst others (Caro, Haff) discover an abundance of small freemen surviving after the Carolingian Grundherrschaft has done its worst. There is room for these facts and many more in the history of the first ten centuries A.D.; and the difficulty found in reconciling them is created by the attempt to force a simple rigid formula on primitive conditions that were at once complex, discrete, and continually fluctuating.

The two chapters on trade, intercourse, and "nationale Wertbildung" contain a valuable survey of a field in which research has of recent years been busy and fruitful, and are based in part, like the agrarian chapters, on special studies of the historian's earlier years. The difficult problem of the early German currencies, with its most important bearing on class-distinctions as measured by the Wergeld, is here reconsidered in the light of the recent contributions to the subject of Professor Vinogradoff and Mr. Seeböhm, Dr. Heck and Dr. Hilliger.

GEORGE UNWIN

Outlines of Economics. (Revised Edition.) • By RICHARD T. ELY. (New York: The Macmillan Co. 1909. Pp. xiii + 700. Price 8s. 6d. net.)

THE activity with which the study of Economics is now pursued on the other side of the Atlantic is plainly demonstrated by the sustained or increasing demand that is felt for systematic textbooks of the character and quality of the present volume. It is a "revised edition" of a manual first issued fifteen years ago; and, while the original "plan" is preserved, most of the chapters have been "entirely re-written and some new ones have been added." In this work three professors have co-operated with the chief author, and Dr. Ely has been assisted by Dr. T. S. Adams, Dr. M. O. Lorenz, and Dr. A. A. Young.

They have, we think, succeeded in the dual aim which must have been set before them—both that of exclusion of the less important, and also that of inclusion of the more essential, of the recent additions to economic knowledge. As they remark in the Preface, there has been in the interval since 1893 "considerable progress in economic discussion"; and in this revision they have attempted to "include so much of the new thought as seems to have established itself." The list of authorities appended to each chapter, and the useful course of further reading suggested at the close of the volume, show that the authors have kept abreast of the literature which proceeds in increasing bulk from

the printing press every year; and a detailed study of any particular section chosen at random would, we are convinced, confirm the favourable impression we have obtained from a rapid consultation. We appreciate the skill and judgment with which the material available has been examined and appraised, and an appropriate employment of it made for the benefit of teacher and student alike.

The general scheme of arrangement commends itself by its simplicity. After an Introduction in which, in accordance with present tendencies, a fair amount of historical information is introduced, to exhibit the environment of fact in which theory has been evolved in the past and must operate in the present, we proceed to the study of "Principles and Problems," under the familiar headings of Consumption, Production, Value and Exchange, and Distribution. The "relation of the State to industry," which occupies the final section of this division of the book, is a subject presenting a suitable opportunity for the treatment of such modern topics as transportation and insurance, the economic activities of municipalities, and socialism. Book III. deals with Public Finance, which has, unfortunately, if not unjustifiably, been omitted from some excellent American manuals of recent date; and Book IV. is devoted to the history of economic thought.

A special feature of the treatise is to be found in the questions placed at the end of each chapter, and we agree with the authors in thinking that they fulfil the promise held out in the Preface, of furnishing a searching test of the pains given and the intelligence applied to the study of the reasoning and exposition on which they are set. We can, in fine, bestow no higher or more deserved praise upon this text-book than to record our opinion that the college and university students, for whom it is intended, will derive as much advantage from its repeated use as we know that many have done from the *Elementary Principles of Economics*, published in 1904 under the joint authorship of Professors Ely and Wicker. We have always considered that little book to be at once the most simple and the most stimulating introduction to economic study of which we are aware; and we can well believe that, as stated in the Preface to the present volume, it should have been employed in a "number of higher institutions," although it was "intended primarily" for "schools." The manual before us is a "more advanced treatise," but it has the same characteristics of lucidity and directness, of awakening and retaining the interest of the reader.

L. L. PRICE

An Elementary Manual of Statistics. By ARTHUR L. BOWLEY.
(London : Macdonald and Evans. 1910. Pp. vi + 215.)

As an elementary guide to the handling of numerical statistics, this manual should perform a useful service. It fills a gap which was much in need of being filled, and, naturally, encounters the ordinary difficulties of the pioneer. That the writing of an elementary text-book is a task vastly more difficult than the preparation of a treatise for advanced students is a commonplace. The most admirable elementary manuals are those which have undergone repeated revision, and many of the points which invite criticism in the volume under consideration are such as are likely to undergo modification as opportunity arises—that is to say, they are more or less natural defects of a path-breaking text-book. Nevertheless, the suggestion that the volume was prepared, probably from lecture-notes, in some haste, forces itself on the reflecting reader of its pages, and the haste is to be regretted if it be the true cause of certain defects, small in themselves, but not negligible when considered cumulatively. The book being especially intended for beginners, the standards by which it must be judged are those that apply to a book for beginners. In such a book much importance attaches to even minor details.

The teachers who have urged their followers to observe their precepts rather than their practice have admitted a well-known failing of humanity. In general the precepts laid down in this manual are admirable, but the expenditure of sufficient time to ensure that they were uniformly observed in the couple of hundred pages of the book would have added to its value as a guide for beginners. It is an excellent maxim that “the principal cause of incorrect use of statistics is want of attention to the definition, meaning, and limitation of each estimate quoted” (p. 3). It was not without a shock that, a dozen pages later, the statement was encountered that “The national expenditure of the United Kingdom is about £160,000,000 . . . the total national income is estimated at £1,800,000,000” (p. 16). The addition of the word “total” to the epithet “national” could hardly be expected to alter the connotation so completely as is clearly intended. National income means here the aggregate income of the citizens, while, two lines earlier, national expenditure refers to the outlay of governments—and not all of that, for in the final chapter it appears that the net expenditure of the central government of the United Kingdom was £132,660,000 in 1908–9, while the

part of the expenditure of local governments for which provision was made by rates had reached £68,600,000 in 1906-7. Clearly attention to the definition of the terms is needed if "national" is to be applied to such different conceptions for income and for expenditure in the same sentence.

In the fourth chapter a useful discussion of approximate figures and the modes of handling them is undertaken. It is, possibly, a matter for consideration whether the beginner in statistics is more helped by being introduced to the phraseology and results of the mathematical theory of error, or hampered by the suggestion of the word "error," that the figures with which he is concerned are compiled without due regard to accuracy. Uncertainty there may be, and it is healthy to recognise it, but it needs some training to become accustomed to the term error in this sense, and a somewhat less sudden plunge into a sea of "errors" might not be without advantage.

The effect of weighting in the compilation of averages is discussed and illustrated, and a useful application, leading up to the construction of a general index of the fluctuations of the volume of foreign trade, is found in the measurement of the progress of the export trade in woollen tissues, where a yard is of varying significance according to the class of fabric concerned. In accordance with the scheme of the book as an elementary manual, the detail of the demonstration that approximate weights are quite sufficient for most purposes is omitted, reference to the author's earlier work being made (p. 17) for the theoretic proof of this point, and an illustration being given in preference to the elaboration of the proof. On p. 77, however, the earlier passage is referred to thus: "It is shown that they (*i.e.*, the weights) need not be taken with great accuracy," while on p. 131 we find the question of weighted averages once more arising in the discussion of prices; and the statement in regard to it is: "It was stated and partly proved on pp. 18 and 32 above that errors involved in such a process tended to neutralise each other." The fluctuation between the view that the proof offered is but partial and the view that it is complete would doubtless be eliminated by a sufficiently deliberate revision of the text.

Naturally, a number of points as to which there is room for controversy are passed by with the assertion of the view which commends itself to the author as most acceptable, as it would not be desirable to enter too deeply into the merits of certain disputes in an elementary work, and it is equally unnecessary to consider the relative merits of the views adopted and of those

rejected in a review of such a book. The existence of a convenient introduction to statistics may contribute to the creation of such an intelligent interest in matters statistical that some of these controversies will be substantially advanced towards definite solutions instead of remaining subjects which are taken seriously only by a few students of abstract theory.

In the second part of the volume readers are informed of some of the principal matters treated in official statistical publications. This should prove a most valuable feature of the book, and we should not be surprised to find that it is expanded when later editions are called for. Among the mass of topics handled and illustrated it is difficult to select matters for special notice, and we may be excused for pointing out what appear to be two small oversights. On p. 163 a table is given in which, among other things, the proportions of the trade disputes settled in each year in favour of the workpeople or the employers, and of disputes not definitely assignable to either of these categories, are stated for each year from 1893 to 1906, the spaces for 1907 being blank and those for 1908 being filled by the statement, "Not given in this form for 1908." This seems to be an oversight, as both the Annual Report and the Labour Abstract for 1907 give the figures for that year (as does the more recent issue of the Labour Abstract, also for 1908), and the Annual Report for 1908 gives the numbers for that year, though it does not reduce them to percentages.

The second point relates to the subject of shipping entered and cleared, discussed on p. 123. The statement that "shipping statistics call for little comment except as to the meaning of tonnage," seems to exaggerate the simplicity of the subject. The issue of the Annual Statement of Navigation for 1908 contains certain figures suggesting a complication the explanation of which would fall naturally into the plan of Mr. Bowley's later chapters. The figures in question relate to arrivals at leading ports in the United Kingdom, and departures therefrom, of ships engaged in foreign trade, and it appears from these figures, as in the case of corresponding figures for French shipping, that the record of entrances and clearances of shipping at some ports falls considerably short of covering the entire movement of shipping in those ports. As is explained in the return referred to, ships which call at several of our ports in the course of a foreign voyage appear but once in the record of entrances and clearances, namely, at the port where foreign cargo is first discharged or first loaded. The entrances and clearances of shipping fail to represent fully

the amount of shipping using ports which are largely used by vessels as intermediate ports of call, or at which numerous vessels terminate a foreign voyage after calling at other home ports *en route*. The right understanding of the shipping statistics needs an appreciation of this point.

It may appear somewhat ungracious to devote most of this review to referring to the defects of execution in a book whose only predecessors were in foreign languages. Practically all of those noticed might have been avoided had the author been able to devote more time to looking after the minuter details of the work. Were the book not intended for beginners, some of the matters mentioned would be of too small importance to call for special notice. As already remarked, the most difficult kind of book to write is an elementary book, for in such a book general excellence does less to render minor defects negligible than in works intended for the more or less expert.

A. W. FLUX

Die Reklame. By DR. VICTOR MATAJA. (Leipzig : Duncker und Humblot. 1910. Pp. iv + 489. 10 mk.)

THIS volume may be described as a vindication of the practice of advertisement. Taking it for granted that advertising is a force which the modern business world cannot dispense with, the writer aims at proving that it is, in the main, a useful and wholesome force; that its methods are capable of improvement, while its faults can in a great measure be remedied. Legislation, combined action on the part of the advertisers, and a more critical attitude on the side of the public can do much to check abuses, whose existence the writer does not in any way seek to minimise.

The aim of production is not attained, writes Dr. Mataja, until the commodity reaches the consumer, and the last step in this journey is by far the most difficult to accomplish. The physical production of goods is child's play compared with the task of their disposal. Hence the value of advertisement, which creates a demand and finds the necessary market. On the psychological basis of advertisement and the theory underlying its successful working, the author gives us two interesting chapters. Another chapter surveys the methods in use with a wealth of fact and illustration covering the entire field. The stimulus given by advertisement to every branch of production is undeniable, nor can we shut our eyes to the fact that advertising creates new values. In England it is estimated that 71,000 persons earn

their livelihood by the technical processes incidental to the practice. There is, further, the value given to hoardings, &c., where advertisements are displayed, and there is the subsidy given to the daily and periodical Press, which speaks for itself. As regards the former, the classic instance is quoted of the West-End restaurant which covered the cost of rebuilding its premises by the receipts for advertisements displayed on the hoardings during the process.

The question of values immediately raises the further question of expense, and the writer admits that the cost of advertisements is perhaps their worst sin. This is especially the case with luxuries, novelties, patent medicines, &c., where the cost of advertising exceeds the cost of production, so that the unfortunate purchaser may be paying one-third of the price for the cost of production and two-thirds for the privilege of being persuaded to buy. But on the whole experience tends to show that advertising does not raise the price of a commodity—at any rate, the firms that advertise largely do not sell dearer on that account. The cost of advertising is not borne by the advertiser, since his profits are increased; it is not borne by the consumer, since the price of the article which he buys does not rise. The only person, therefore, left to bear the cost is the unenterprising competitor who does not advertise.

That advertisements often mislead—that worthless articles are frequently boomed at the expense of a gullible public, and that the Press is in danger of being tyrannised by the advertiser—Dr. Mataja does not attempt to deny. But he holds that these abuses are accidental, and are, as a matter of fact, prejudicial to the advertiser himself. He cites the example of an American paper, *The Declinator*, which decided to reject the advertisements of patent medicines, beauty specialists and so forth, that had hitherto appeared in its columns. The immediate result was the offer of genuine, good-class advertisements in much larger number than the displaced quackeries. The same profitable course is open to every paper of repute, which would find that it has much to gain and nothing to lose by purifying its advertisement columns. Further, even the most persistent booming will not secure a permanent place in the market for worthless goods. An article may be bought once because it is widely advertised—it will be bought always only on its proved merits.

On the subject of competitive advertising the writer has many sound things to say, but comes to no definite conclusion. It has been objected that the puffing of, say, a variety of soaps will

not really induce people to buy more soap; at the most it will persuade them to buy A's soap rather than B's—a result which may be a matter of complete indifference, economically, to the public. This, Dr. Mataja points out, leaves out of account the elasticity of the market and the educative possibilities of advertisement. But when all has been said, it is difficult to forecast the future of advertisement, and the exhaustive study of the subject which has furnished the writer with the material for this volume, leads him to conclude that the economic effects of the practice are not exactly measurable, and that its powers have not been fathomed by modern industry.

H. REINHERZ

The Economics of Railway Transport. By S. C. WILLIAMS.
(Macmillan and Co. Pp. 308. Price 3s. 6d.)

It was with a feeling of real pleasure that we read this book, for it is the exception, and not the rule, for a useful addition to the literature on railway economics to come from the pen of an Englishman. Even so, we have to confess that Mr. Williams has gained his knowledge and experience of railway matters on an Indian railway, so English railwaymen cannot claim him as one of themselves.

Mr. Williams used as the basis of his book a short course of lectures given at Cambridge in the early part of last year, and this fact is traceable in many parts of the book. The course was clearly too short to permit of the ground being properly covered, and the same may be said of the book. Mr. Williams has attempted to do far too much in too small a space. With a fifth of the book devoted to an historical survey and general economic analysis of railway transport, there remain but 250 small pages of large type, and in these the attempt has been made to deal with the economics of the production, distribution, and consumption of railway transport. The inevitable result is that, just as Mr. Williams gets the reader interested in a point, he switches him off on to the next. This is very much to be regretted, as Mr. Williams is clearly an able writer, widely read, and well versed in his subject.

In spite of this fundamental defect the volume is full of suggestion. An excellent example is found in the discussion of the economy of large train-loads. Mr. Williams gives excellent reasons for his view that, apart from differences due to physical characteristics of railways, large trains are to be considered in

conjunction with the distance traffic travels. A train which would be a large train in England and represent the maximum for economical working, would be a small train for America where the haul is four or five times as great. This certainly suggests a field for investigation. What is the economical size of a train with a given length of haul?

In dealing with the commercial side of railways, Mr. Williams has an interesting chapter on passenger fares. This is noteworthy not only for its intrinsic merit, but also because most writers on railway economics dismiss the matter in a footnote or some equally brief manner. Attention may also be directed to the discussion of the special characteristics of railway competition. It is clear that some interests must suffer where competition exists. It is not, however, equally clear that preference should always be given to consumers rather than producers, as Mr. Williams contends. However, all will agree with the final conclusion—that as the State claims a greater share in the control and management of railways, there is need for a governing body which will formulate and pursue a definite policy.

There are sundry minor blemishes which should be removed before a second edition of the book appears. Thus “barime” has been printed for “barème,” and “economics” for “economies” in another place. The index is inadequate.

W. T. STEPHENSON

Europe's Optical Illusion. By NORMAN ANGELL. (London : Spinkin, Marshall. Pp. 126.)

MR. ANGELL has cleverly put together a superficial syllogism. According to him, the sole purpose of the State is to enable the citizen to get a “decent livelihood.” This is the major premise. The minor premise is that the State’s power of giving its individual citizens a chance of getting a decent livelihood cannot possibly be diminished by defeat nor increased by success in war. Therefore war is absurd, and will disappear so soon as men can get rid of the optical illusion that war can in any circumstances bring material advantages to the victor. Neither the major nor the minor premise will bear serious examination. Mr. Angell’s seventh chapter, devoted to showing that the British Colonies are substantially foreign nations, and that Great Britain gets less advantage from them than if they were in every sense foreign nations, is better worth reading than the rest of his volume, because it raises questions difficult to be answered by those whose

conception of the value of what is called the Empire is material and mechanical. It may help them to consider whether a nation is based upon "duties" or duty.

SPENSER WILKINSON

Malthus. By ACHILLE LORIA. (*Numero VI. degli Profili:* pubblicazione periodica, editor Professor A. F. Formaggini, Modena. 1909. Pp. 85. Price 1 lira.)

IN this dainty little volume Professor Loria writes in his lighter vein. His sketch embraces in short space almost every aspect of his subject, and is pleasant to read. Like Iago, he is nothing if not critical. Malthus on the whole is more praised than blamed; but the blame is severe. Malthus, he says, treated his chief problem as biological, whereas it is really economic (p. 31). "It is the proportion not between population and the means of subsistence, but between population and productive capital, that determines the degree of prosperity which a population enjoys" (p. 37). Malthus does not see that it is even theoretically impossible for his arithmetical increase of food and geometrical of population to proceed together beyond the third place in the series (p. 28). He sees only the sinister side of his own doctrine (p. 40), Ricardo being wiser (p. 42). His essay was not strictly economic at all, but sociological or philosophical (p. 57). Yet he made the subject so truly his own that the world lost not a little when he was made a Professor of Political Economy, and was thereby forced to talk and write on subjects which he never really mastered (pp. 60, 78). Darwin and Marx were more fortunate; they never held a chair (pp. 79, 80.) When all is said, the theory of Malthus has "a serious and unalterable pedagogic value"; it is a warning against real dangers (p. 56); and the private character of the man was consistent, unselfish, and in every way admirable (pp. 81, 82).

In regard to more than one of the criticisms of the essay, it might perhaps be shown that they disregard the text of the essay itself. The ratios (whatever we may think of their fitness as a metaphor) were meant to describe tendencies, not to convey a prediction. The stimulus to activity, which is the other side to the sinister one, is rather exaggerated than under-valued by Malthus even in the first essay of 1798.

Our author himself is a brilliant proof that the effects of elevation to a Professor's Chair are not necessarily fatal to concentrated study; and we need not mourn over Malthus "grinding

in Gaza at the mill with slaves." Beyond this one sinister aspect, if it indeed be so, there is not much that is dismal in Professor Loria's biographical picture. One touch is new : "He is often winner in the boat-races on the Thames " (è ad un tempo rematore infaticabile, e riporta non di rado la palma nelle gare del Tamigi, p. 81). It rests on good authority that he once caught a cold from canocing on the Cam and being upset there; but Ricardo is bantering when he expects to see his friend "a candidate for the annual wherry" (letter to Malthus, Sept. 21st, 1819). On similar evidence Falstaff was declared by a German commentator to have robbed the Exchequer with the assistance of Prince Henry.

J. BONAR

The Working Faith of the Social Reformer. By HENRY JONES.
(London : Macmillan and Co. Pp. 305. Price 7s. 6d. net.)

PROFESSOR JONES thinks that one of the deepest needs of our time is a science of social life. The people lack the way rather than the will towards social reform. There exists a widespread stable faith in the order of nature, but belief in the social and moral order is weak and nervous, though religion and poetry proclaim it. The way is long from the inspired insight of the poet to the reasoned conviction of the philosopher. And the road is difficult by reason of the multiplicity of the objects upon it and their ever-changing character. Do not the vast compass and infinite variety of modern life make a science of such life impossible? But can we give up the attempt? It is the nature of mind to organise its material into a systematic unity. Society which is the product of reason is, therefore, the exhibition of the nature of reason, and is, therefore, rational. Science, art, and human action are the spiritual revelation of the rational principle in virtue of which the world subsists. Recent attempts to discover the laws of this self-manifestation of reason in society have failed because of the use of unsuitable categories. The social sciences have been the playground of analogies borrowed from physics and biology. Man never knows how metaphorical he is! This abuse of physical and mechanical metaphors has led to insoluble statements of the problems of law and freedom, character and environment, socialism and individualism. The right category to use is spirit or self-consciousness, and the indispensable preliminary to any science of society is an analysis of self-

consciousness. Subject and object are present within it from the beginning. The relation of man and his world is that of mutual inclusion. On this view character and environment are two names for the same thing. When the character is formed, that is, when the self has internalised its environment, attempts to reform it fail; for a vitiated character turns all opportunities into its own substance. On the other hand, the power of society over unformed childhood is indefinitely great. "Wherever the obligations of the parents are easily loosened the conditions are already so bad that it is time for the State to interfere on behalf of its coming citizens."

This rapid summary will suffice to indicate the way along which Professor Jones thinks a science of society should be sought. It is the way of a thoroughgoing Idealism which holds, not only that the real world is ideal, but also that the ideal world is real. He tells us nothing about the Dyaks of Borneo and the Aztecs of Mexico. These are taken for granted in the all-embracing hypothesis that the complete rationality of the universe will be revealed at the end of its development rather than at its beginning. Two charges have commonly been brought against Idealism: its excessive subjectivity and scorn for "despicable actualities," and its pure formalism which has sometimes led to its identification with Quietism. The special value of the work before us is the way in which it confronts these charges, first, by tracing the twofold movement of spirit—the union and concurrent realisation of self and not self, of the good that is personal with the good that is common; and secondly, by applying Idealism to concrete issues of our time: to the rights of property, to tariff reform, and to socialism.

The economic view of society, the author urges, is inadequate. The altruistic reference is present but it is indirect. In a purely economic state neighbours would tolerate one another, but each would find his end in himself. But property is not a mere material fact, and a right to it is an essentially social matter. It is "a station and its duties." The more moralised the individual, the more socialised is his will; the more developed the State the more independent its members. The State and the individual grow together. The coming of socialism is the coming of individualism. The State is a moral agent and the supreme aim of the reformer must be to moralise our social relations as they stand, and make every industry a school of virtue. "Our Trade our Politics" is a fundamentally immoral maxim. Protection and Retaliation are "methods of barbarism" hindering the realisation of a good for

each that is a good for all. Protection "would put a strain upon the private morality and the political honour of British citizens, and upon the rectitude of their representatives, from which we have all inherited the right to be free."

Hegel once warned philosophers against seeking to be edifying. Professor Jones may not have aimed at edification, but his book is full of kindling thought expressed in memorable phrase, and with many a humorous sally at the Pragmatist. This is not the place to discuss the author's metaphysics. He is concerned with society as a system of moral personalities, rather than with society as a system of services rendered in the making and spending of incomes. The economist has claims to be heard in the formulation of any science of social life, but the last word must be with the philosopher. And the philosopher in this book appeals to the citizens to spiritualise their business and their politics. This is his solution of the social problem. Did we but honour man and reverence the State, then the secularities of trade and commerce would be transfigured, and the evils of sweating and boy labour, casual labour and unemployment, would be overcome, for, with Kant, we should respect men as persons, and, with Burke, we should care for the wounds of the State as for a father's.

THOMAS JONES

People's Banks. A Record of Social and Economic Success. By HENRY W. WOLFF. Third Edition, newly revised and enlarged. (London: P. S. King and Son. 1910. Pp. 582. 6s. net.)

MR. WOLFF's third edition is practically a new book: and this fact reflects the persistent growth, extensive and intensive, of co-operative credit over nearly the whole of Western Europe, with the notable exception of our laggard England. Since, however, the recent Small Holdings Act contemplates *inter alia* the formation of credit banks, and since there is now before the House of Lords Lord Shaftesbury's Bill for promoting thrift and credit banks, the question can no longer remain one of academic interest only for English readers. Mr. Wolff's book is a piece of first-hand scholarship, but he happily refers in the course of his descriptions to practices which England would do well to follow and mistakes which she *must* avoid. With legitimate pride, the author is able in this edition of his work to refer to the establishment of co-operative banks in certain parts of

the world (in particular in Quebec, Canada) as the direct outcome of the earlier edition. How few, alas! can say any such thing of their own economic output.

Banking, however, cannot be understood without careful examination; and co-operative banking is particularly liable to be misunderstood. The essentials of the co-operative bank may be said to be three: the credit-users are the members of the bank; the credit given is chiefly personal, in the sense of being credit to a member who is guaranteed explicitly by one or two other members; this credit is intended primarily, but not exclusively, for comparatively small men. Bearing these essentials in mind, the reader will be able to follow the author through the labyrinth of countries and statistics and forms of institution. Two great types of genuinely co-operative banks will then be seen to emerge—the one suited particularly to artisans, shopkeepers and big farmers, the other suited only to small agriculturists; the one operating by the methods of short loan, current account and bills of exchange, the other confined mainly to simple loans (longer in duration, but repaid by punctual instalments), and adventuring only at its peril into the separate domain of mortgage credit; the one usually named a “Schulze-Delitzsch” bank, the other still more usually a “Raiffeisen bank,” after the German prototypes. Mr. Wolff, however, insists on the important point that different countries can adapt these types to their own peculiar conditions. Thus Italy has quite rightly abandoned unlimited liability in its *Banche popolari*, founded by the Hon. L. Luzzatti, Prime Minister of Italy, to whom this book is dedicated; and Schulze-Delitzsch's banks themselves, with his own ultimate sanction, have in some cases with perfect propriety done the same thing. For the Raiffeisen bank unlimited liability is more important, since they have no share capital to speak of; but even with limited liability such banks might be reproduced in England, provided they were of parish area, in the main self-supporting, and wholly self-managed.

Governments, especially our own Treasury (to judge from the severe raps administered from time to time by the author to this august body), are usually fairly slow in taking up new ideas; but they are also wonderfully impatient of results when they do set about the work of social reform. Therefore it is that some, if not most, of the Governments of Europe, in their zeal for agriculture and the middle class, have, by excessive presents or free loans of money, given an unhealthy stimulus to the co-operative movement. This book proves conclusively by examples

taken from country after country how this pernicious procedure warps the co-operative spirit and, in fact, defeats its own object : witness in particular the State-fed *caisses* attached to the French *syndicats* ; the moneys poured through the ordinary banks of South Italy in the vain hope of rivalling the genuine village banks of the North ; the earlier *comptoirs agricoles* of Belgium and its National Savings Bank, which is now (as is also the soundly organised Co-operative State Bank of Prussia) wisely encouraging the unions of co-operative banks themselves to find their own deposits and manage their own central banking ; and finally the quite silly grants showered on groups of Dutch banks which already have a plethora of funds. Much of this assistance is not merely wasteful ; it positively checks the growth of local deposits and the willingness to borrow.

Let it not be supposed for a moment that Mr. Wolff is a narrow individualist. He recognises the need for State help of a certain kind—in particular the need of instruction, frequently also of assistance in inspection, and occasionally of initial grants in exceptional cases, as in the poor congested areas of Ireland or in some of the Slav districts of Austria and Russia, or in British India, with its backward population. The recent developments in Hungary and India constitute perhaps the most important new matter in the book. In Hungary the leading figure has been Count Károlyi, the founder of the National Central Credit Institution, for which the bulk of the money is provided by a number of territorial magnates. This is not full co-operation, but, as Mr. Wolff justly remarks : “Hungary is a backward country, and probably no other scheme would have proved effective at the time” (p. 248). In India, State aid in the sense of careful organisation by the Registrars has also been necessary ; but one reads with pride in Chapter XVII. (pp. 514–544), on India, how well the officials have adapted credit banks to the needs of their particular districts, how they have made the repayment of loans independent of the tax-collector, and have begun to entice into the banks some of the famed hidden hoards of native India. It would seem, indeed, that Englishmen can administer other countries better than their own. We equipped South America with electric services, while our own municipalities clung to horses and gas. We have pioneered co-operation over India, while neglecting our own countryside and hindering our organisers with Treasury red tape and official misrepresentation in Parliament.

But, it may be objected, has the author really proved that England is in need of this co-operative credit? He has, fully

and indubitably. He shows how the amalgamation of banks in the United Kingdom is in danger of starving small provincial men—and only ingenious evolutionists imagine that the small man has no place in modern industry—how Scotch cash credit, personal credit with non-co-operative management, made industrial Scotland, and how its loss may help to unmake it. He indicates, too, in agriculture how small holdings, if they are given a decent chance and a favourable environment, repay landlords by better rents and the nation by finer men. "There is," he writes (p. 62), "scarcely an agent who does not admit that in these trying times small farms and small holdings pay out and out best." And to the agricultural expert we would ourselves remark: While prizing as before the stock of our wealthy graziers, would you not be wise to attach also just a little value to the creation of a sturdy peasantry? But if small holdings, not merely the statutory holdings of the recent Act, but the much more numerous, spontaneous holdings scattered over the country, are to succeed, they must have ample facilities for legitimate credit. The joint-stock banks seem to think this kind of business too much trouble, although they are probably willing to co-operate with local village banks. Credit with dealers (not so much in England with professional usurers as with firms in the ordinary course of business) is expensive and demoralising to the recipients. Why not, therefore, give the co-operative village bank a decent intelligent trial? It is uniformly successful abroad, when administered on a business-like footing. Englishmen in other lands have proved its use for the inhabitants there. May we suggest that English readers of this book can pay Mr. Wolff no greater tribute than studying it with a view to helping forward the establishment of co-operative banks in their own district, no matter whether the district be urban or rural.

Both English and foreign students have written about co-operative credit. It will be found in general that where these works, in whatever language, differ from that of Mr. Wolff, the latter is the more correct.

C. R. FAY

Le società di mutuo soccorso. ULISSE GOBBI. 2nd Edition. (Milano. 1909.)

THE second edition of this work was welcomed by the studious public with lively satisfaction. The book offers, co-ordinated in a synthesis of rare profundity and lucidity, the results of the expert knowledge of the author on a subject of great importance to modern economic and social life.

The author considers in the first chapter the economic characteristics of mutual aid societies (*società di mutuo soccorso*), and seeks above all to define them exactly in relation to their fundamental functions, assurance and co-operation, by illustrating elaborately their work in each of these directions in the light of the theoretical principles regulating undertakings of the two types. There follows an exhaustive analysis of the legal nature of the Italian mutual societies (*sodalizi mutualistici*), the various groups of which are reviewed in detail : societies founded under the law of April 15th, 1886, or having received recognition by royal decree (not more than 23·7 per cent. of the whole—*i.e.*, 1,506 out of 6,535) ; mutual aid societies founded as mutual assurance associations ; mutual aid societies founded as co-operative companies (*società anonime co-operative*) ; mutual aid societies recognised as benevolent institutions ; mutual aid societies not legally constituted. An examination of the various classes to which the author thus reduces the great multiplicity of types belonging to this species of institution leads up to a skilful treatment of the great variety of problems, as often legal as economic, which are connected with their organisation and work. Points which seem to us important are, amongst others, the exposition of the character of societies recognised as such, within the meaning of Section 1637 of the Civil Code ; the observations respecting the practical advantages of the various kinds of institutions in particular cases, and those relative to the legal position of benefit institutions (*casse di soccorso*) or provident funds (*fondi di previdenza*), resembling in so many respects the mutual aid societies.

From this extensive analysis there appear at once the omissions and defects in Italian legislation on the subject and the need for amendment. "The law of 1886, although most liberal, is nevertheless regarded with mistrust by the working classes, whilst others who would readily accept it, such as employees and clerks, cannot take advantage of it. Recognition by royal decree is nothing but a licence granted by the public administration, and the rareness of the cases in which such recognition has been procured suffices to show how it fails to meet general exigencies. The other forms of legal constitution can only be adapted with difficulty to the needs of mutual aid societies, whilst sometimes, according to authoritative opinions, it would not even be possible to adopt them. To exist without being legally constituted, which is the course resorted to by the majority of societies, is not unattended by inconveniences and in many cases even serious risks." The author accordingly recommends reform with the object of

preparing mutual aid societies to act as organs for compulsory assurance against sickness; he expounds the principles of this reform, and enters upon a succinct comparative examination of the French, English, Swiss, German, and Austrian arrangements in this matter.

After having, in two further chapters, exhausted the legal part of the subject with an examination of the various systems and the numerous problems, both practical and theoretical, arising from the constitution, organisation, and administration of mutual aid societies, Signor Gobbi enters into a field of more specially economic interest, and proceeds to discuss the financial arrangements of such bodies and to make a very clever inquiry into the elements of the cost of each class of benefit and charge. The technical and book-keeping principles derived from these considerations are co-ordinated step by step into a logical and harmonious whole, giving rise to the conception of a model society deduced from the experience of unsystematic attempts, and based upon a rigorously mathematical and scientific system.

The last chapter brings us to the evolution to which mutual benefit systems (*mutualismo*) are subject at the present time, to the points of contact with the numerous institutions and undertakings of a different type, which aim at the moral and material improvement of the working classes.

If account is taken of the objects of mutual aid societies, it is clear that they are affected by benevolent institutions, by savings banks, and by other assurance institutions having a similar end in view. Considered as organisations for the benefit especially of the working classes, they come into contact with other forms of co-operation and with associations for the protection of trade interests. The author illustrates with great abundance of original observations the nature and scope of the relations of every kind which thus enter in as connecting tendencies, and he shows how it would be possible for a more rational organisation of such undertakings, promoted and favoured by a prudent intervention of the law, to augment, in the interests of collective institutions, the material and moral return obtained by efforts, now in part badly distributed and divergent. The foreign reader will appreciate especially these very pleasing conclusions—theories the application of which transcends the scope of problems relating to Italian *mutualismo* in particular, but which enhance the importance of a book, valuable for the practical information it contains, and at the same time truly remarkable for the nobility of its scientific purpose.

G. PRATO

NOTES AND MEMORANDA

APPLICATIONS OF PROBABILITIES TO ECONOMICS

PROBABILITY, in that general sense in which it has been called the guide of life, is of wider application to Political Economy than dogmatic theorists imagine. Of this extensive field one corner only is here explored, namely, that species of Probability which is amenable to mathematical theory. The calculus of Probabilities and the principles of Economics may seem, indeed, quite distinct branches of knowledge. Yet I submit that they have a root in common. The theory of Probabilities lends to Economics, as to other sciences, certain premisses which are evidenced, neither by pure intuition, nor by formal induction, but by general impressions, and what may be called mathematical common sense. Of this character is "the assumption that any probability-constant about which we know nothing in particular is as likely to have one value as another"—an assumption made by Laplace and endorsed by Pearson.¹ This so-called *à priori* probability is employed in the theory of measurement, not only with respect to probability-constants, but also for the determination of other kinds of constants. The coefficients which characterise curves and surfaces and analytical *functions* corresponding to these geometrical forms, are presumed, in the absence of evidence to the contrary, not to have extreme values, not to be enormously great or indefinitely small. For where the possible values range over a certain tract with some approach to equality of distribution, it may be presumed that they do not often occur at the limits of that tract. The curves with which we have to deal in practice do not abound in *singularities*. The increment of a function corresponding to an increment of the independent variable is not commonly immense. There usually holds good, or is tenable as a working hypothesis, the fundamental principle that of interdependent variable quantities an increment of one is at-

¹ Pearson, *Grammar of Science*, Second Edition, p. 146.

tended with a (simply) *proportional* increment of the other; throughout a tract of sensible extent.¹

"Commonly" and "usually" may seem strange terms to occur in a mathematical proposition. But I submit that the conception is required by mathematicians. Thus Hamilton, in explaining the definition of "differentials" (with reference to his own original calculus) has to employ the phrase "in all ordinary cases."² The following is a typical extract from Laplace.³ It relates to the problem of *correcting* an "element [quantity under measurement] already approximately determined, by means of numerous observations each of which represents, or purports to be equal to, a known *function* of the element.

"If we substitute in that function instead of the element its [known] approximate value *plus* the correction [called] z ; then develop the function in ascending powers of z ,⁴ and neglect the square of z [and higher powers thereof], the function will assume the form $h + pz$ [where h and p are constants]."

Now, of course, it may happen that the coefficient p is enormously great, and so the proposed simplification will not be available. Laplace, however, in the above cited and many other passages, tacitly assumes that this will not happen.

The sort of continuity which must be postulated for practical purposes is not of exactly the ideal continuity about the definition of which mathematicians dispute. A broken line, or succession of dots, may often be treated as if continuous. In Probabilities curves of "error," or "facility," are to be conceived, I hold, as series of discrete points. In Physics the received molecular theory seems to require a similar conception. Thus Clerk Maxwell, with reference to Atoms:—

"The principle of continuity, which is the basis of the method of fluxions and the whole of modern mathematics, may be applied to the analysis of problems connected with material bodies by assuming them, for the purpose of this analysis, to be homogeneous. . . . Thus if a railway contractor has to make a tunnel through a hill of gravel, and if one cubic yard of gravel is so like another cubic

¹ Beyond a certain tract—a certain amount of change in one of the quantities, considered as the independent variable—it may be expected that the *proportion* itself changes, yet not *per saltum*; it being assumed, when nothing is known to the contrary, that $\frac{d^2y}{dx^2}$, as well as $\frac{dy}{dx}$, is not immense. In short the Taylorian expansion in ascending powers is presumed to hold good for two or three terms at least. Much use will be made of this presumption in the sequel of this paper.

² *Quaternions*, Joly's edition, Vol. I., p. 432.

³ *Théorie Analytique des Probabilités*, Liv. II., ch. IV., §20.

⁴ So I freely translate "*en réduisant en série par rapport à z .*"

yard that for the purposes of the contract they may be taken as equivalent, then in estimating the work required to remove the gravel from the tunnel he may, without fear of error, make his calculations as if the gravel was a continuous substance. But if a worm has to make his way through the gravel, it makes the greatest difference to him whether he tries to push right against a piece of gravel, or direct his course through one of the intervals between the pieces; to him, therefore, the gravel is by no means a homogeneous and continuous substance."¹

I cannot pretend to give an adequate exposition of the philosophy which underlies the science of Mathematical Physics. But if there is a part of that mysterious substructure which at all corresponds to the description above given, then it cannot be considered as paradoxical that a less exact science should rest in part upon similarly inexact axioms.

I submit, therefore, that in Economics we must sometimes be content with premisses not better evidenced than those which have been above attributed to Physics. For example, Professor Pigou, reasoning about the incidence of a differential duty on foreign wheat, very properly begins:—"Presuming, as in the absence of knowledge is reasonable, that the elasticity of production is the same at home and abroad."² If any one specially conversant with the trade in wheat is able to correct this presumption, that does not prove Professor Pigou wrong in making it, or in adhering to it until more exact information is forthcoming. In this world it is often necessary to act though we know only in part. Thus M. Colson, for the important purpose of estimating the utility of a "public work," prescribes that, adopting a mean value [*en moyenne*], in the absence of more exact data, we may evaluate the benefit per unit of new traffic,"³ by a formula which amounts to this, as I understand. Whereas we know nothing of a certain curve, bounding an area which is to be measured, except that the curve joins two given points and that it slopes continually downwards.⁴ Under these circumstances we may, for the purpose of the measurement, put for the curve the right line joining the given points.⁵ Of course this

¹ Article on *Atoms*, *Encyclopædia Britannica*, ed. 9, Vol. III., p. 38.

² *Cp ECONOMIC JOURNAL*, Vol. XIX., p. 105.

³ *Cours d'Économie Politique*, Liv. VI., p. 203.

⁴ By which condition an indefinitely large divergence of the curve from the line is excluded.

⁵ In Professor Marshall's construction—more familiar to English readers than M. Colson's (*cp. ECONOMIC JOURNAL*, Vol. XIX. (1810), p. 58)—the sought measure is the mixtilinear figure bounded by the horizontal line representing the increase of traffic, the vertical line representing the decrease of price and the demand curve; the area

kind of *à priori* presumption is liable to be superseded by specific evidence as to the shape of the curve; for instance, if there were sometimes ground for supposing it to be convex, as was, in fact, suggested by M. Colson's distinguished predecessor, Dupuit.¹ There is required, I think, in a case of this sort, in order to override the *à priori* probability, either very definite specific evidence, or the consensus of high authorities.

Another application of *à priori* Probabilities to economic curves is made by M. Colson with reference to the probability of neutral equilibrium between demand and supply; the supposition that the equation of demand and supply "might be equally satisfied by every numerical rate which could be supposed," in the phrase of J. S. Mill. Mill has entertained this conception in that central part of his chapter on International Value which has seemed to many the least satisfactory part of the chapter and of the whole work.² Of this sort of neutral equilibrium M. Colson says³ :—

"A coincidence such that two functions should preserve the same value, for all values of the variable extending over an interval not indefinitely small presents a degree of improbability which is equivalent to a mathematical impossibility."

Another example of *à priori* probability is the presumption, in the absence of evidence to the contrary, that demand (and supply) curves will not be of an extreme and limiting form—not very rigid or very inelastic. Unfortified by a general presumption of this sort, we are apt too easily to let pass arguments which take for granted that the demand for some article under consideration, for instance, house-accommodation, is perfectly inelastic.⁴

The issue whether an economic curve slopes rapidly or gently is distinct from the question at what degree of minuteness the continuity of the curve breaks down; what is the *minimum divisible* of currency, the *minimum vendibile* of

PRA in Professor Marshall's fig. 10, *Principles of Economics*, Book III., ch. VI., § 3, ed. 4) corresponding to an increase of output from OM to OH; an area like BB''b''₂ in the diagram representing M. Colson's conception in the review just now mentioned.

¹ *Annales des Ponts et Chaussées*, 1844, Vol. 2, p. 367.

² It is criticised by Professor Marshall in his unpublished papers on Foreign Trade (the papers referred to in the Preface to his *Principles*), by Professor Bastable in his *International Trade*, p. 11, ed. 3, and by the present writer in the *Economic Journal*, Vol. IV. (1894), p. 611.

³ *Cours d'Économie Politique*, Liv. I., p. 1, with reference to the supply of and demand for work: not referring particularly to Mill.

⁴ See on this point *Economic Journal*, Vol. X., pp. 187-9, and Vol. XX., p. 244 (the present number).

commodity. Thus the question whether there would be a great increase in the consumption of alcoholic liquors, if the heavy taxes now imposed on them were removed, is not much affected by the circumstance that the retail price of a pot of beer can only decrease (say) by a halfpenny at a time. That comparatively trifling circumstance may often be abstracted by the theoretical economist. He cannot always be adjusting his speculative instruments to the two scales of magnitude distinguished in Maxwell's parable of the gravel hill. He may permissibly devote himself to the difficult calculations proper to the contractor, while he leaves to his critics the easy task of making allowances for the idiosyncrasies of the worm.

Referring for further observations on *à priori* Probability to former publications,¹ I now go on to consider more closely two examples—or sets of examples—the first already introduced to readers of the ECONOMIC JOURNAL, the second new.

I. For the purpose of securing attention to the obscure subject of this study, it happens, fortunately, that the subject bears upon Professor Seligman's deservedly popular treatise on *Shifting and Incidence of Taxation*. Many of the criticisms with which Professor Seligman has honoured my observations on the theory of taxation in a *régime* of monopoly, turn upon the question whether the assumptions above described are legitimate.

The suggested difficulties about my use of the term "in general," as applicable to the case of continuity, and of "friction" in the contrary case,² may, I hope, be removed—or at least reduced to questions of terminology—by the explanation above given. Continuity of the rough sort which characterises curves in Physics and Probabilities, may be properly, or at least intelligibly, described as "general" in Economics, affording as it does a first approximation beyond which it is frequently unnecessary to proceed.

Professor Seligman still continues (in his third edition) to ask :

"Is it fair to assume that a small change of price is 'more general' than a great one? And would Professor Edgeworth's elaborate formulæ all hold good if the change of price were substantial?"³

To which I reply, as I have already replied (to the second edition) :—

"Certainly, the formulæ hold good for substantial changes of

¹ See ECONOMIC JOURNAL, Vol. XVII., p. 227, and references there given.

² *Shifting and Incidence*, third edition, p. 345.

³ *Shifting and Incidence*, third edition, p. 345 ; second edition, p. 276.

price as long as the conditions of a maximum continue to be fulfilled, that is, presumably for some finite distance. . . . Because the mathematical investigation advances by tentative steps it is not precluded from going in the direction of the rise of price as far as any other method [can go safely]."¹

Cournot's method of short steps is the only (tolerably) safe one; Professor Seligman's giant steps over the space of a quarter of a dollar in his favourite illustration,² may terminate in a precipice. It is true that not even Cournot's method is perfectly safe. Pure Mathematics—exclusive of applied Probabilities—can only guarantee the safety of a single step; or not even that in case of a *singularity* occurring at the point (of the demand curve) with which we are concerned. In order to obtain a practical conclusion the Calculus of Probabilities must be grafted on the Differential Calculus,³ as I have elsewhere explained.

Had Professor Seligman entertained the, I think, received assumptions as to the curves employed in applied Mathematics, he would have prevented some misunderstanding of his doctrine as to the relation of elasticity to taxation in a *régime* of monopoly. Professor Seligman had said (in his first edition):—

"The greater the elasticity of demand the more favourable—other things being equal—will be the position of the consumer."⁴ This proposition I very naturally understood to imply that if in the long run of general practice we could distinguish those cases in which the elasticity of the demand curve was particularly great, we should find that the liability of the consumer to suffer by taxation (in a *régime* of monopoly) was particularly small. I not only disputed this thesis, but the method of proving it, which seemed to me to consist in the observation of examples not taken at random, but selected as having an attribute favourable to the thesis.⁵ It was Voltaire, I think, who said that you could kill a flock of sheep with incantations—if accompanied by arsenic. Now it seemed to me that Professor Seligman, while professing to observe the effects of "incantations," had taken care that "arsenic" should be present in each instance. But on considering his amplified statement (in the third edition) I am led to believe that I was mistaken; that he meant "arsenic" all the time—though he said "incantation." I surmise that, instead

¹ *ECONOMIC JOURNAL*, Vol. IX. (1899), pp. 308, 309, and context.

² Cited below, p. 292.

³ *ECONOMIC JOURNAL*, Vol. XVIII. (1908), p. 399.

⁴ *Shifting and Incidence*, ed. 1, p. 191; quoted by me in the *ECONOMIC JOURNAL*, Vol. IX., p. 303; amplified by the author in his third edition, p. 345.

⁵ *ECONOMIC JOURNAL* (*loc. cit.*), p. 304.

of the false thesis above cited, there was intended the true thesis which is obtained by substituting in that statement for "elasticity of demand," *increment* of that elasticity. Or rather we ought to put as that quantity of which the thesis affirms that the greater the said quantity the more favourable will be the position of the consumer, the following, or some equivalent coefficient; the increment, with the increase of price, of the decrement-of-demand-corresponding-to-increment-of-price.¹ For there now comes into view a distinction which might be safely ignored so long as we were concerned only with a single point on the demand curve (a point which might, however, be treated as representative of the neighbouring tract, in virtue of the principle just now explained). The distinction which now arises is between elasticity in the *proper* sense of the term as defined by Professor Marshall,² and elasticity in a popular sense, presumably the coefficient above defined; or more simply, the slope of the demand curve. The complications connected with the use of *elasticity proper* were evaded in my former paper,³ as they will be in the present paper, by the device of (in effect) taking as the unit of commodity and price respectively the values which render the monopolist's revenue a maximum. For the slope and the elasticity of the curve then coincide. But when we pass from the attribute itself to the *increment* thereof, a choice between the two meanings must be made. There can be little

¹ The phrase made up of words connected by hyphens is used to denote the positive quantity $[-F'(p)]$, if with Cournot we put $F(p)$ to denote the amount demanded at the price p . We might, of course, equally well—*pace* Professor Seligman—designate this coefficient as the increment-of-demand-corresponding-to-decrement-of-price. The increment of this coefficient with the increment of price is the greater the smaller that $F''(p)$ is; since by an increment of price, Δp , $[-F'(p)]$ becomes $[-F'(p) - \Delta p F''(p)]$. But the smaller that $F''(p)$ is the less (other things, and in particular $F'(p)$, being the same) is the increase of price due to a small increase of cost of production or taxation, say τ per unit of commodity. For by Cournot's theory (*Principes Mathématiques*, ch. V., § 31) that increase is $\tau \frac{F'(p)}{2F'(p) + pF''(p)}$,

which may be written $\tau \frac{[-F'(p)]}{2[-F''(p)] - pF''(p)}$; where the denominator is necessarily positive. The smaller that $F''(p)$ is, the greater is the denominator of the above fraction; and, therefore, the smaller the fraction itself, the less the rise of price in consequence of the tax; in accordance with the thesis enunciated in the text. (It may be well to warn the reader that "smaller," as here applied to $F''(p)$, means that this quantity is less, *account being taken of its sign*. When, as frequently, $F''(p)$ is negative, its value is less the greater its *absolute quantity* is—as a man is poorer, the greater his debt is.)

² *Principles of Economics*, Book III., ch. IV. Compare Palgrave's Dictionary: article on "Elasticity" (by the present writer).

³ See ECONOMIC JOURNAL, Vol. IX., p. 291, and below, p. 301 note. In the sequel we shall have to do with cases in which the elasticity proper is (at assigned points) the same for demand curves with different slopes.

doubt, I think, but that our author would choose the popular sense. An intelligible and true meaning can thus be assigned to his statements :

"Demand is said to be more elastic when each successive increase of price leads to a greater falling off in demand."¹

"After the point of maximum monopoly revenue has been reached, the more elastic the demand the smaller will be the proportion of the tax that he [the monopolist] is apt to shift to the consumer."²

It will be apparent that it is impossible even to enunciate the writer's thesis without the use of the methods which he condemns. The above interpretation is put forward with diffidence as it is perfectly consistent with the sort of continuousness which I have all along postulated for demand curves. Professor Seligman seems to call for a "*Deus ex machinâ*" where no "*dignus vindice nodus*" occurs, if my interpretation of his thesis is correct. But the absence from his view of the matter of those conceptions and presumptions which are the subject of this paper is, I fear, fatal to our mutual understanding.³

I take to myself blame for the misunderstanding that has occurred, so far as it may have been aggravated by my neglecting to point out the distinction between increment of slope and increment of elasticity proper. But we are not now concerned with ordinary negligence. Such human error is to the defect which we are now considering as ordinary mistakes in spelling are to those which are perpetrated by a type-writing machine. The latter exhibit a want of that minimum of orthography which is common to articulate men. A similar absence of conceptions and presumptions present to the general mind seems to be evinced by our author's persistent use of a certain demand-

¹ *Shifting and Incidence*, third edition, p. 346.

² *Loc. cit.*, p. 345 ; more explicit than the corresponding passages in the second edition (p. 277).

³ The following quotation, with the comment thereon, may illustrate our mutual inaccessibility. "My assumption," says Professor Seligman, "is that of a demand which becomes more or less elastic after the point of maximum monopoly revenue has been reached. Professor Edgeworth's assumption is that of a demand which is more or less elastic from the outset, before, as well as after this point."¹ Upon which I remark: (1) I can accept the assumption which Professor Seligman takes to himself if, as is natural to interpret, it involves no more than the usual presumptions that the slope of a curve and the increment to the slope (say $\frac{dc}{dp}$ and $\frac{d^2c}{dp^2}$, where p is the price and x the quantity demanded at the price) both vary gradually. And (2) I cannot accept the assumption attributed to myself if, as is natural to interpret, it involves something more than those usual presumptions.

¹ *Shifting and Incidence*, p. 347. Note par. 1.

schedule, with wide intervals between the entries. I once more reproduce in a variant form this scheme of data.¹

PROFESSOR SELIGMAN'S DATA.

Price in \$	4	5	5½	5½	5¾	6
Amount demanded.	1200	1000	900	825	750	700
Gross receipts ...	4800	5000	4725	4537·5	4312·5	4200
Net receipts A ...	2400	3000	2925	2887·5	2812·5	2800
Net receipts B ...	2100	2750	2700	2681·25	2625	2625

Net receipts A are based on a cost of two dollars per unit of product, without tax.

Net receipts B are based on the same cost, together with a tax of a quarter of a dollar per unit of product.

Now if it is merely meant that the transaction is of such a kind that differences of price less than a quarter of a dollar cannot be taken into account, *cadit quæstio*. I have fully admitted that reasoning based on ordinary degrees of continuity does not apply to this particular case.² If my critic meant no more than this, he would hardly have repeated (in his new edition) his schedules and arguments. It is incredible, too, that he should regard an exception of this kind as a refutation of Cournot's theory of taxation in a *régime* of monopoly. One might as well pretend to have damaged the Ricardian theory of taxation in a *régime* of competition by adducing the well-known little fact that, in the words of a distinguished Chancellor of the Exchequer,³ a very small additional duty "can hardly fall on the individual consumer of a glass of spirits or a pot of beer." Besides, if this had been our author's meaning, why keep to such wide intervals of price as a quarter of a dollar?

Upon whatever principle constructed, this schedule may be likened to a net with meshes so wide as to lose half the catch. To remedy this defect we might fill up the vacant spaces with a finer reticulation. This will be effected if we put a continuous curve through six points representing the specified amounts of commodity corresponding to the several prices; an appropriate form being assigned to the curve, and the constants being then calculated from the data. Or, as it is rather a troublesome matter to construct such a curve,⁴ it must suffice to construct

¹ See *Shifting and Incidence*, third ed., pp. 343, 344; second ed., pp. 275, 276; and compare *Economic Journal*, Vol. IX., pp. 307, 308.

² *Loc. cit.*, p. 307.

³ Vernon Harcourt, Budget Speech, 1894.

⁴ I had made some progress in constructing a rational integer function of the fifth degree passing through six points representing Professor Seligman's data, by Lagrange's method of interpolation, when I saw reason for apprehending that, though the data are quite fair and typical of a demand curve, the curve thus constructed might not fulfil the main condition of a demand curve, that its slope should be continually negative. The incident illustrates the necessity of choosing a proper form for a function—as Professor Pearson advises—before going on to calculate the coefficients.

a continuous curve complying with the parts of the data which are essential to the argument.

Here is a particularly simple curve of the sort :—

$$x = 900 + 200\sqrt{5\frac{1}{4} - y};$$

where x denotes the quantity of commodity demanded at any price y . Here, in accordance with the data, $x = 1000$ when $y = 5$; and $x = 900$ when $y = 5\frac{1}{4}$. Also xy is, as it ought to be, a *maximum* when $y = 5$; as is proved by general reasoning,¹ and may be verified by actually trying values of y in the neighbourhood of 5, *e.g.*, 4.9 and 5.1.

Now let us suppose, with Professor Seligman,² that the cost of production—the tax imposed by the nature of things—is \$2 per unit of commodity. The quantity to be maximised by the monopolist is then $x(y - 2)$. And we cannot suppose with Professor Seligman that the price continues to be \$5;³ unless, indeed, it is postulated—a postulate surely not of general validity and one to which Professor Seligman has not called special attention—that the monopolist cannot charge a price intermediate between a dollar and a quarter of a dollar. If the formula which we have assigned for the demand curve were perfectly exact, the phenomenon perfectly continuous, the price would now theoretically be 5.1439 (nearly); that being the value of y which renders the above expression a maximum.⁴ The actual price will be an approximation to this ideal limit. If the price can be graduated to a cent, the monopolist will charge, in addition to the original 5 dollars, 14 or 15 cents; whichever of the two makes the net proceeds greater.⁵ If, in addition to nature's tax of 2 dollars per piece (for cost of production), there is imposed an ordinary tax of a quarter-dollar per piece, the principle is just the same. We have now to find y so that $x(y - 2\frac{1}{4})$ should be a maximum. The value of y which fulfils this condition is found to be

¹ When $y = 5$, $\frac{d}{dy}xy = 0$, while $\frac{d^2}{dy^2}xy < 0$.

² *Loc. cit.*, p. 343.

³ *Loc. cit.* "He will always prefer the price \$5." Compare the "net receipts A" in our Table, embodying Professor Seligman's data.

⁴ We have now to determine y the equation :

$$\frac{d}{dy}(y - 2)(1000 + 200\sqrt{5\frac{1}{4} - y}) = 0.$$

Whence :

$$1000 + 200\sqrt{5\frac{1}{4} - y} - \frac{100}{\sqrt{5\frac{1}{4} - y}}(y - 2) = 0.$$

Reducing, we obtain a quadratic equation of which the only available root (the other root being negative) is 5.14389 . . .

⁵ The integer preferred is not necessarily the one nearest to the theoretical price.

5.1583. . .¹ Accordingly, the monopolist will charge an additional 15 or 16 cents, whichever makes the net proceeds greater (no doubt here the latter).

If half-dimes are the lowest admissible denomination, he will charge either 5 dollars and 3 half-dimes, or 5 dollars and 4 half-dimes; if dimes are the lowest denomination, either 5 dollars and 1 dime or 5 dollars and 2 dimes; if quarter-dollars are the lowest admissible denomination, the monopolist will charge either 5 dollars, or 5 dollars and 1 quarter-dollar—in each case adopting that alternative which makes the net proceeds a maximum. The last case might be designated by the proposition for which Professor Seligman contends, namely, that “the monopolist will continue to find his greatest profit in continuing to charge the original price”; if we could suppose that an able controversialist in a considered rejoinder would reaffirm as decisive in his own favour a proposition understood by himself and intended to be interpreted in exactly that qualified sense in which it had been explicitly affirmed by the other party to the controversy.²

The simple curve which has been adduced is sufficient for the purpose of showing the various results of a tax—all comprehended under one simple law—according as different degrees of continuity prevail. But the illustration is suitable only for taxes of a limited magnitude, as the curve stops short at the price $5\frac{1}{4}$. Here is a more appropriate, though less easily manageable, representation of the proposed law of demand:—

$$x = 842.265 + 246.227 (5.26289 - y)^{\frac{1}{2}}$$

Here, as before, when $y = 5$, $x = 1000$ (approximately); when $y = 5\frac{1}{4}$, $x = 900$; and xy is a maximum when $y = 5$.³ Moreover

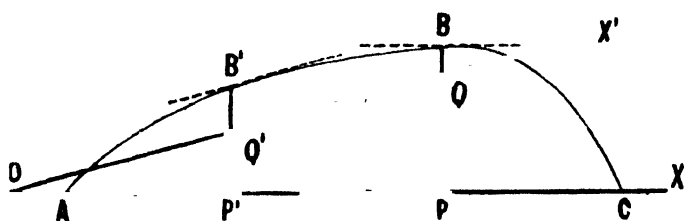
¹ This value is found from a quadratic equation by reasoning of a parity with that employed in the preceding note. It may be well to remind the reader that the reasoning and conclusion are similar in the case of an (*ad valorem*) tax on gross receipts,¹ as distinguished from a (*specific*) tax on gross product. Suppose that an *ad valorem* tax of 5 per cent. is imposed on the gross receipts. The amount which the monopolist will now seek to maximise is $\frac{19}{20}xy - 2x = \frac{19}{20}x(y - 2\frac{1}{5})$; an expression of the same form as that which it was proposed to maximise in the case of a specific tax.

² See ECONOMIC JOURNAL, p. 307, where, quoting the proposition again quoted here, I add “He will” [continue to “charge the original price”] “if he can only alter the price *per saltum* by leaps of $\frac{1}{4}$ dollar. . . . If the monopolist can adopt an intermediate price between \$5 and \$5 $\frac{1}{4}$, I submit that he will tend theoretically to do so. . . .” This proposition is entirely in accord with the explanation which has been given by Professor Jannacone (referred to by Professor Seligman) in his “Questione Controverse,” first published in the *Riforma Sociale*, xii. (1902).

³ When $y = 5$, $\frac{dy}{dx} = 0$, $\frac{d^2y}{dx^2} < 0$.

now when y is greater than $5\frac{1}{2}$ (as well as less than 5), a series of values of x are presented not very different from and corresponding in their general trend to Professor Seligman's data, and equally favourable to his thesis. Thus when the price, $y=4$, I find¹ that the amount demanded, x , is now = 1108.4 (instead of 1200); and when $y=6$, $x=619.8$ (instead of 700). Now let us introduce the cost of production, \$2 per unit piece; and as before we can prove by general reasoning and verify by actual trial that a price intermediate between 5 and $5\frac{1}{2}$ —namely, about 5.13—affords the maximum monopoly revenue. Additions to the tax may be exemplified as before, but now on a larger scale.

But, indeed, it is not necessary for the purpose of rendering our author's data typical to adapt thereto an analytical expression, a curve defined by an equation. It suffices to draw with a free hand a continuous curve passing through points which represent the data as to price and corresponding demand. Or let us take the series of points each of which have for abscissa (measured on the axis OX) the amount of commodity put by the monopolist on the market, and for ordinate that amount multiplied by the price at which that amount is demanded. We may then have a curve in its general shape resembling that in the accompanying diagram; which is copied from an illustration which I employed in a former paper.²



The revenue which the monopolist seeks to maximise was there compared to the height which a prisoner confined in a narrow vaulted cell seeks to maximise, namely, the vertical distance from the crown of his head to the sole of his foot. That position of greatest comfort is defined by the point P , while the floor OX is horizontal (in the absence of taxation, including cost of production). But when (corresponding to the introduction of a tax) the floor is tilted up into the position OX' , then the position of greatest comfort recedes from P to P' (the amount put on the market diminishes).

¹ With the aid of logarithms.

² *ECONOMIC JOURNAL*, Vol. VIII. (1898), p. 236.

I proceed now to enlarge the cell of the prisoner in order to illustrate a theorem to which Professor Seligman has not, I think, done justice. While he expends labour in proving what comes to nothing but the obvious and admitted fact that when the law of demand is sensibly discontinuous, there may occur a suspension *pro tanto* of the general rule that taxation is attended with an increase of price; he passes by slightly, and fails to see the significance of the theorem that, even though the law of demand be perfectly continuous, taxation in a *régime* of monopoly, may not only not injure, but actually benefit the monopolist's customers—in the case of articles which are to some extent substitutes for each other, such as first-class and third-class accommodation on a railway journey. Reverting to the parable of the prisoner in the cell, we have now to regard the area bounded by the curve $AB'BC$ in the diagram as the section no longer of a narrow cell, but of a vaulted curve which extends far into a third dimension perpendicular to the plane of the paper. Let the reader hold the page before him with its plane perpendicular to that of the table; and let him measure, in a direction from him, along a new axis Y , perpendicular to the plane of the page and parallel to that of the table,¹ a length y representing the amount of a second commodity, say third-class accommodation. Let the amounts of the two commodities (first-class and third-class accommodation) be initially x_0 ($=OP$) and y_0 ; and after the imposition of a tax x_1 ($=OP'$) and y_1 . Then x_1 is less than x_0 . But what about y_1 ? For all we know the output of the second quantity also may be diminished in consequence of the tax on the first commodity. But this is the less probable alternative; as I have argued from an inspection of the symbols employed.² In the case of this the less probable alternative, the phenomenon now in question, the fall of both prices, cannot possibly occur.³ But in the more probable case of y_1 being greater than y_0 (y_2 greater than y_1 , and so on, throughout a tract of sensible magnitude), the concurrent fall of prices may quite possibly occur—however ridiculous it may appear to careless thinkers who transfer to a *régime* of monopoly the maxims proper to the classical *régime* of competition. It all depends on the value of certain coefficients which determine the change in prices. The values of these constants

¹ A line parallel to the vertical PB in the diagram may be taken for the axis of Z , on which is measured the amount of the monopolist's net revenue corresponding to assumed outputs, x and y , of the two commodities.

² *Teoria pura del Monopolio*, Giornale degli Economisti, 1897.

³ If not self-evident, this proposition may be deduced from the formulæ (*mutatis mutandis*) in the Note at the end of this paper.

which are favourable to the double event are not, I think, *a priori*, extremely improbable. The conditions which they must fulfil¹ are not excessively exacting. Here is an example which does not strike one as specially unlikely. The number of first-class passengers (per day, week, or other unit of time) being x , and the number of third-class passengers being y , the fares in pounds sterling, p_1 and p_2 respectively, are connected by the equations :²

$$p_1 = L1 \left[\frac{17}{5} \left(\frac{x}{100,000} \right) - 2 \left(\frac{x}{100,100} \right)^2 - \frac{2}{5} \left(\frac{y}{200,000} \right) \right]$$

$$p_2 = L\frac{1}{2} \left[\frac{73}{30} - \frac{22}{15} \frac{y}{200,000} + \frac{13}{30} \left(\frac{y}{200,000} \right)^2 - \frac{2}{5} \left(\frac{x}{100,000} \right) \right]$$

The form of these equations is the simplest consistent with (1) the hypothesis that the demand for one commodity is diminished by the possession and consumption of a certain amount of the other commodity, and (2) the presumption that a demand curve is not a right line.³ As the *form of the functions* presented is ordinary so the *values of the coefficients* do not appear *outré*. And yet a tax on first-class tickets will cause *both* fares to drop.

To show this let us begin with the simple supposition that cost of production (the working expenses assignable to the varying numbers of passengers) may be left out of account. Then the revenue which the company, acting as a monopolist, seeks to render a maximum, is $x p_1 + y p_2$. If p and p_2 are connected with x and y in the manner supposed, this expression will be a maximum, when $x = 100,000$ $y = 200,000$; that is, when $p_1 = £1$, $p_2 = \frac{1}{2} £1$ ($= 10s.$); as is proved by general reasoning,⁴ and

¹ The conditions are investigated in the Note at the end of this section. For a popular statement of the *rationale* of the phenomenon see ECONOMIC JOURNAL, Vol. VII. (1897), p. 231, and Vol. IX. (1899), p. 288.

² The reader may be advised to substitute (as in the final Note below) for $\frac{x}{100,000}$ the new variable x , and for $\frac{y}{200,000}$ the new variable y .

³ Unless there occurred the term involving x *squared*, the demand curve for x , which represents the amount of x varying with the price thereof while the amount of y is kept constant, and the corresponding demand curve for y , would degrade to a right line.

⁴ Substituting x for $\frac{x}{100,000}$ and y for $\frac{y}{200,000}$, and putting $V = 100,000 x p_1 + 200,000 y p_2$ we have for the conditions that V should be a maximum, the two (simultaneous) equations :

$$\frac{34}{5}x - 6x^2 - \frac{4}{5}y \left(= \frac{dV}{dx} \right) = 0$$

$$\frac{73}{30} - \frac{44}{15}y + \frac{13}{10}y^2 - \frac{4}{5}x \left(= \frac{dV}{dy} \right) = 0$$

(together with three inequations—relating to the second term of variation). The two equations (and the three inequations) are satisfied by the system of values $x=1$, $y=1$. Whence $x=100,000$, $y=200,000$, $p_1=1$, $p_2=\frac{1}{2}$.

may be verified by actual trial¹ of values x and y in the neighbourhood of 100,000 and 200,000 respectively (corresponding to values of p_1 and p_2 in the neighbourhood of £1 and 10s. respectively).

Now let a tax of 2s. per ticket be imposed on first-class passengers. It will then pay the monopolist company to lower first-class fares by about $2\frac{3}{4}d.$ and second-class fares by about $3\frac{3}{4}d.$ ² For at these new prices the numbers of passengers will be about 96,713 first-class and about 214,518 second-class.³ It follows that the gross receipts will be diminished by a matter of some £150.⁴ But the net receipts will be greater; for though £150 or even £153, has been lost, there has been saved £328 14s., the tax which the monopolist would have had to pay on the 3,287 first-class passengers who have dropped out. There is thus a net saving of about £175.

It is no serious objection that the transaction instanced, passenger fares, is of a kind which does not admit (like some wholesale transactions) of making prices in fractions less than the lowest coin in currency; that a mite ($\frac{1}{4}d.$), and even a farthing, can hardly figure in passenger fares. In such a case, as above fully explained, the monopolist will fix that integer number of the lowest available units (say half-pence)—in the neighbourhood of what we called the “theoretical price”—which affords the maximum revenue. The degree of fineness to which the currency is graduated is a matter of quite secondary interest in relation to a theorem of the kind which we are now considering.

So far we have made abstraction of cost of production. But it may easily be shown that to take it into account is not fatal to the possibility of both prices falling in consequence of a tax. Consider any case of the kind hitherto considered—where there is no cost of production—in which the conditions are favourable

¹ An example occurs in the next paragraph.

² These prices were suggested by the values obtained from the generalisation of Cournot's formula for the change of price (and quantity) due to a tax on a monopolised article. That formula is but a first approximation to the variation that is most advantageous for the monopolist; and in the case before us, where the variation is considerable, proves misleading. A better example would have been formed by a lower rate of taxation. For further reference to the example see the final Note.

³ As appears by substituting these values for x and y in the above-written expressions for p_1 and p_2 .

⁴ $96,713 \times 237\frac{1}{4}d. + 107,259 \times 2 \times 116\cdot625d. = £199,847 \text{ 3s. } 5d.;$ less by £152 16s. 7d. than the gross receipts prior to the change of prices, namely, £200,000. But I would not guarantee the accuracy of the last digits in the numbers of the passengers after the change. It is accurate enough to say that the loss (on the gross proceeds) will be about £150.

to the occurrence of the double event. In such a case it may be presumed, by *a priori* Probability, that as the tax is increased from zero up to some finite amount, say t , the monopolist will continue to subtract more and more from both prices. Now suppose that a part, say half of t , is not an ordinary tax, but that loss of gross receipts which the niggardliness of nature imposes, namely, cost of production. The consequence of imposing a tax (in the ordinary sense) of $\frac{1}{2} t$ per unit (in addition to nature's tax of $\frac{1}{2} t$) will be, under the circumstances, to lower both prices.¹

The improbability of the event in question is, I grant, very considerable; but it is not enormous, does not amount to practical impossibility. The improbability is not even very considerable, I think, if the paradoxical characteristic, benefit to consumers (in consequence of a tax), is defined so as to include, besides the case of both prices falling, the case in which, though one price rises, the "consumers' surplus" is not as usual impaired, but, on the contrary, increased.² To secure this result only one condition³—not as before, two—must be fulfilled. If Δp_1 and Δp_2 are the increments of the respective prices consequent on an increment of taxation, it is now postulated—not that both Δp_1 and Δp_2 should be negative—but only that $x'\Delta p_1 + y'\Delta p_2$ (where x' and y' are the respective outputs—prior to the tax) should be negative.

The theory in this more general form may seem open to the sarcasm which Professor Seligman directs against the primary form of the theory: that it "will surely be a grateful boon to the perplexed and weary secretaries of the treasury and ministers of finance throughout the world."⁴ The suggested discrepancy between common sense and mathematical inference may seem really to be made out when it is inferred that benefit to the consumers as a whole is not a very improbable consequence of a tax. But the appearance of absurdity is obtained by looking only at one aspect of the theory. We have so far confined our-

¹ Compare ECONOMIC JOURNAL, Vol. IX. (1899), p. 292 last par. and p. 293.

² Professor Seligman's words (employed in another connection) "the more favourable . . . will be the situation of the consumer" (*Shifting and Incidence*, second edition, p. 191, quoted in the ECONOMIC JOURNAL, Vol. IX., p. 303) seem well adapted to describe the increase of Consumers' Surplus; and I had supposed that the words might bear this meaning. But I now find (*Shifting and Incidence*, third edition, p. 348) that Professor Seligman repudiates this interpretation; and I apologise for having supposed that he might have entertained an appropriate conception.

³ In the symbols employed in the Note at the end of this section the single condition is $\omega_2(\epsilon_1 + \rho) < 2\rho(\epsilon_2 + \rho)$.

⁴ *Shifting and Incidence*, third edition, p. 214.

selves to the case in which the output of the untaxed commodity is increased in consequence of the tax. But, if the alternative—quite possible, though *à priori* less probable—case occurs, then the consumer will be damnified in consequence of the tax to an extent beyond what might be supposed. Professor Seligman might with almost equal plausibility have suggested as the outcome of the theory that—whereas it is natural to suppose that the displacement of first-class passengers by the tax will swell the numbers of the second-class—the theory implies that the accommodation of both kinds will be restricted with, of course, considerable rise of prices. The “boon” to weary financiers might now be represented as the lesson that it is inexpedient to tax the more expensive species of a commodity, as the consumption of the less expensive species will thereby be restricted to a greater extent than might be supposed.

But in truth the boon which the theory confers is not a definite rule, but the warning to distrust rules transposed from the *régime* of competition to that of monopoly.¹

I hope to adduce, under head II., an example of *à priori* Probability more directly applicable to practice.

NOTE.—On the probability of a tax on one of two articles which are partially substitutes for each other producing a fall in the prices of both articles; in a *régime* of monopoly.

Let us begin with the simplest species of correlated demand, that in which the relation between the increment of the price of one commodity and the increment of the amount in hand of the other commodity is uniform: namely a constant ratio. This occurs when the total Utility, say U , derived by the consumer from assigned amounts, say x and y , of each commodity is of the form

$$F_1(x) + F_2(y) - rxy;$$

where r is a constant, here positive. Then the prices, p_1, p_2 , at which the amounts x and y will be purchased must be such that $U - p_1x - p_2y$ is a maximum (see ECONOMIC JOURNAL, Vol. IX., 1899, p. 290, and *Giornale degli Economisti*, 1897, there referred to). From this maximum condition are obtained the two equations:

$$p_1 = F_1'(x) - ry, \quad p_2 = F_2'(y) - rx;$$

and the three inequations:

$$F_1''(x) < 0, \quad F_2''(y) < 0, \quad F_1''(x)F_2''(y) > r^2.$$

Two more equations, and three more inequations, are furnished from the condition that the monopolist's revenue, say V , should be a maximum, namely,

$$\begin{aligned} \frac{dV}{dx} = 0, \quad \frac{dV}{dy} = 0; \\ \frac{d^2V}{dx^2} < 0, \quad \frac{d^2V}{dy^2} < 0, \quad \frac{d^2V}{dx^2} \frac{d^2V}{dy^2} > \left(\frac{d^2V}{dx dy} \right)^2 \end{aligned}$$

¹ Even the terms proper to the *régime* of competition are to be transplanted with caution; and I agree with Professor Jannaccone (“*Questione Controverse*,” *Riforma Sociale*, Vol. XII.) as to the infelicity of the term *Shifting* applied to taxation under the *régime* of monopoly.

These conditions may be expressed in a more convenient form by putting $x = \frac{x'}{x}$, $y = \frac{y'}{y}$, where x' and y' are the values of the variables for which the monopolist's revenue is a maximum. Let p be the price of the first commodity when x' is the unit; and likewise p_2 of the second commodity when y' is the unit. Let p_1' be the value of p_1 , p_2' of p_2 , when $x=1$, $y=1$; and let $r = \sqrt{p_1' p_2'} p$. We may then write the first two equations thus:

$$(1) p_1 = p_1' [f_1(x) - \rho \sqrt{\frac{p_2'}{p_1}}]; \quad (2) p_2 = p_2' [f_2(x) - \rho \sqrt{\frac{p_1'}{p_2}}];$$

where $p_1' f_1(x) \equiv F_1'(x)$, and $f_1(x) - \rho \sqrt{\frac{p_2'}{p_1}} = 1$, when $x=1$, $y=1$, and the like is true of the second equation. Now put $F_1''(x) = -p_1' \epsilon_1$, $F_2''(y) = -p_2' \epsilon_2$, and we have

$$(3) \epsilon_1 > 0; \quad (4) \epsilon_2 > 0; \quad (5) \epsilon_1 \epsilon_2 > \rho^2.$$

To simplify the remaining conditions let us begin with the supposition that cost of production need not be taken into account. Then the monopolist's revenue takes the form $x p_1 + y p_2$; and in order that it should be a maximum, there must be satisfied by the values $x=1$, $y=1$ the two equations

$$p_1 + x \frac{d p_1}{d x} + y \frac{d p_2}{d x} = 0, \quad p_2 + y \frac{d p_2}{d y} + x \frac{d p_1}{d x} = 0.$$

Whence

$$(6) 1 - \epsilon_1 - \rho \sqrt{\frac{p_2'}{p_1}} = 0; \quad (7) 1 - \epsilon_2 - \rho \sqrt{\frac{p_1'}{p_2}} = 0.$$

Let us at first make the simple supposition that $p_1' = p_2' =$, say, p' ; the investigation pursuing, as it were, a narrow path between two broad tracts of possible relations between the two constants. Then conditions (6) and (7) reduce to a single equation $1 - \epsilon - \rho = 0$ (where $\epsilon = \epsilon_1 = \epsilon_2$). Substituting in condition (5) the value thus obtained for ϵ in terms of ρ , we have

$$(1 - \rho)^2 > \rho^2; \quad 1 - 2\rho > 0; \quad \rho < \frac{1}{2}.$$

Next, putting, for $\left[\frac{d^2 V}{d x^2} \right]_{x=x', y=y'} = -p' \omega_1$, and for $\left[\frac{d^2 V}{d y^2} \right]_{x=x', y=y'} = -p' \omega_2$; we have

$$(8) \omega_1 > 0; \quad (9) \omega_2 > 0.$$

Lastly (since, on the suppositions which have been made, $\left[\frac{d^2 V}{d x d y} \right]_{x=x', y=y'}$ reduces to $-p' \rho$) we have (10) $\omega_1 \omega_2 - 4\rho^2$ (say Ω) > 0 .

* .. The conditions which have been formulated may be described as *general*, implied in the construction, whether a rise or a fall of one or of both commodities, in consequence of a tax on one of them, may occur. There are still required two *special* conditions in order to secure that the increments of the two prices, say Δp_1 and Δp_2 , consequent on a small (or "incipient") tax, say τ (see as to the smallness the text above, and ECONOMIC JOURNAL, Vol. XVIII., there referred to), on the first commodity should both be negative. These conditions are

$$\frac{d p_1}{d x} \Delta x + \frac{d p_1}{d y} \Delta y < 0, \quad \frac{d p_2}{d x} \Delta x + \frac{d p_2}{d y} \Delta y < 0;$$

where Δx and Δy are the increments in the amounts of the commodities consequent on the tax. These increments are obtainable (by a generalisation of Cournot's theory respecting the incidence of a tax on a *single* monopolised article) from the simultaneous equations:

$$\begin{cases} -\omega_1 \Delta x - 2\rho \Delta y = \tau; \\ -2\rho \Delta x - \omega_2 \Delta y = 0. \end{cases}$$

Whence

$$\Delta x = -\frac{\tau}{\Omega} \omega_2; \Delta y = +\frac{\tau}{\Omega} 2\rho.$$

We have now to substitute these values of Δx and Δy in the two *special* inequations, which may be written

$$\begin{aligned} -\epsilon_1 \Delta x - \rho \Delta y &< 0, \\ -\rho \Delta x - \epsilon_2 \Delta y &< 0 \end{aligned}$$

(where $\epsilon_1 = \epsilon_2 = \epsilon$). Making the substitutions we obtain the two special conditions:

$$\begin{aligned} \text{(i)} \quad \epsilon \omega_2 &< 2\rho^2, \\ \text{(ii)} \quad \rho \omega_2 &< \epsilon 2\rho; \text{ or } \omega_2 < 2\epsilon. \end{aligned}$$

These conditions taken with the preceding are not very exacting. If ρ were in the neighbourhood of $\frac{1}{2}$, all the conditions might be satisfied by values of ω_1 and ω_2 in the neighbourhood of unity, which may be considered a probable and typical value for such constants. However, ρ must be supposed at some distance below $\frac{1}{2}$, that value being its extreme limit. For example, put $\rho = \frac{1}{3}$. Then $\epsilon = 1 - \rho = \frac{2}{3}$. Therefore ω_2 (by Condition i) $< \frac{2}{9} \div \frac{2}{3} < \frac{1}{3}$. Say ω_2 is $\frac{1}{4}$, the other special Condition (ii) is then fulfilled. All the general conditions, too, will be fulfilled if ω_1 is negative, except Condition (10); and in order that Condition (10) should be satisfied it suffices that $\omega_1 > \frac{2}{9} \div \frac{1}{4} > \frac{1}{6}$. Again, let $\rho = \frac{2}{5}$, $\epsilon = \frac{3}{5}$. Conditions (i) and (ii) are satisfied by $\omega_2 = \frac{1}{5}$. Condition (10) will be satisfied if $\omega_1 > \frac{4}{5}$.

It is quite easy to find very simple functions, *e.g.*, algebraic integer rational expressions (quantities) of the second degree which comply with assigned values of the constants ρ (involving ϵ), and any admissible values of ω_1, ω_2 . Put

$$\begin{aligned} p_1 &= p'(a_1 - \beta_1 x - \gamma_1 x^2 - 2\rho y); \\ p_2 &= p'(a_2 - \beta_2 y - \gamma_2 y^2 - 2\rho x). \end{aligned}$$

Then if any positive value less than $\frac{1}{2}$ is assigned to ρ and accordingly a value greater than $\frac{1}{2}$ assigned to ϵ , we obtain four linear equations connecting the constants with ϵ ($=\epsilon_1 = \epsilon_2$), ω_1, ω_2 ; the values of x and y being each unity. Also $a - \beta_1 - \gamma_1 - 2\rho = 1$, $a_2 - \beta_2 - \gamma_2 - 2\rho = 1$. We have thus six simple equations to determine the six coefficients $a_1, \beta_1, \gamma_1, a_2, \beta_2, \gamma_2$.

For example, let us suppose that, as in the penultimate paragraph, $\rho = \frac{1}{3}$ (and accordingly $\epsilon = \frac{2}{3}$), $\omega_2 = \frac{1}{4}$, and—keeping clear of the limiting value $\frac{1}{6}$ — $\omega_1 = \frac{2}{3}$. These data are embodied in the (compound) law of demand:

$$\begin{aligned} p_1 &= p'(\frac{7}{3} + x - \frac{5}{3}x^2 - \frac{1}{3}y), \\ p_2 &= p'(\frac{2}{3} - \frac{1}{3}y + \frac{1}{3}y^2 - \frac{1}{3}x). \end{aligned}$$

If a small tax is imposed on the first commodity, it will be the interest of the monopolist to lower both prices.

In order that the phenomenon may not only exist but also be of practical significance, it ought to hold good for taxes of some magnitude. But the bare fulfilment of the necessary conditions will only secure the required effect for a first step, for a tax that is literally “incipient” (cf. above, p. 289, par. 2, and reference). For if $\Omega (= \omega_1 \omega_2 - \rho^2)$ the expression for the denominator in the values for Δx and Δy due to a tax, τ (per unit of the first commodity), is very small, then it may be expected, on the principle of *a priori* probabilities, that in the expansion of V , the monopolist's revenue considered as a function of x and y , in ascending powers of Δx and Δy , the *third* term of variation will soon gain on the second in such wise that the second ceases to be as it ought to be, *negative*. Thus, even in the example just given, though Ω is not very small, namely, $\frac{2}{3} - \frac{1}{9} = \frac{5}{9}$, x and y have not far to travel from the point at which V is a maximum ($x=1, y=1$) before the second term of variation, viz.,

$$\frac{1}{2} \left(\frac{d^2 V}{dx^2} dx^2 - 2\rho dx dy + \frac{d^2 V}{dy^2} dy^2 \right),$$

ceases to be negative for all (indefinitely small) values of dx and dy . In fact, the surface V , concave at the point $x=1$, $y=1$, very soon becomes convex, and soon presents a point at which the distance measured vertically between the plane floor and the vaulted ceiling according to the theory (above, p. 296) is not, as it ought to be, a maximum, but a *minimum*! To verify this incident, which is proved by an examination of the *third* term of the expansion of V , I have solved the simultaneous equations:

$$\begin{cases} \frac{7}{8} + 2x - \frac{5}{8}x^2 - \frac{3}{8}y \left(= \frac{1}{p} \frac{dV}{dx} \right) = 0; \\ \frac{9}{24} - \frac{7}{8}y + \frac{1}{8}y^2 - \frac{3}{8}x \left(= \frac{1}{p} \frac{dV}{dy} \right) = 0. \end{cases}$$

Eliminating y , I find a biquadratic equation for x ; of which one root is as it ought to be *unity*. Dividing the biquadratic by $x-1$, I obtain a cubic equation, of which the only available root is 0.9861, corresponding to $y=1.06$. And before this minimum point has been reached, the surface has lost its necessary concavity. Accordingly, attending to the relation between r and Δx , we cannot reckon upon the effect in question being produced by a tax as high as two per cent. The example in the text (p. 298) is constructed so as to avoid this limitation; ω_1 being there as large as $5\frac{1}{2}$, and accordingly ($\omega_2=\frac{1}{3}$, $\rho=\frac{7}{8}$), $\Omega=\frac{7}{8}\frac{7}{8}$. Accordingly, a tax up to a higher percentage will reduce both prices.

By taking the constants properly we can obtain exemplifications of the phenomenon on a larger scale. But it may be well to remind the reader that the simple form of function which we have chosen is not well adapted to represent *very great* changes of prices. For instance, in the example given in the text we cannot, consistently with the conditions that the demand diminishes *ceteris paribus* as the price rises, and so $\left(\frac{dp_1}{dx}\right) < 0$, $\left(\frac{dp_2}{dy}\right) < 0$, suppose that the given formulae adequately represent the laws of demand for values of x less than $\frac{1}{2}7$, or values of y greater than $\frac{7}{8}$; with corresponding limitations of the *prices*.

Now let us retrace our steps to that point earlier in the investigation at which we took the easy path intermediate between two unexplored tracts (above, p. 301, par. 3), characterised by the inequality of the constants p_1' and p_2' . If p_1' is not equal to p_2' , let $p_2' = \lambda p_1'$ while p_1' still $= p_1'$; where λ may be either greater or less (but not equal to) unity. Then the expression for the monopolist's revenue becomes (all the other assumptions being retained)

$$p_1' \left[(f_1(x) - \sqrt{\lambda}\rho) + \lambda \left(f_2(y) - \frac{1}{\sqrt{\lambda}}\rho \right) \right].$$

Proceeding as before we shall find the same *special* conditions for the constants, viz.,

$$(i) \omega_2 < 2\rho^2 \div \epsilon_1; \quad (ii) \omega_2 < 2\epsilon_2.$$

Now ρ will be smaller, the greater the inequality indicated by the constant λ . For from the Conditions (6) and (7), taken, as before, with (5), we obtain as

the superior limit for ρ , $\sqrt{\lambda} + \frac{1}{\sqrt{\lambda}}$. Therefore ρ is less than $\sqrt{\lambda}$, or $\frac{1}{\sqrt{\lambda}}$,

according as λ is less or greater than unity. In the former case, as from Condition (6), ϵ_1 must be particularly large, from Condition (i) it appears that ω_2 must be extremely small. Thus the less the significance of the untaxed object to the consumer and to the monopolist, the less probable is the sort of interaction by

which the phenomenon in question is brought about. On the other hand, if λ is very large—the taxed commodity figuring as relatively very small in the expenditure of the consumer and the revenue of the monopolist— ω_2 need not be improbably small. Rather, the range of values favourable to the phenomenon becomes wider.

Still retracing our steps we come to the point at which we left on one side cost of production. First, supposing the law of returns to be *constant*, we may regard the cost as a sort of specific tax. And then it would appear (as suggested in the text) that the heavier the cost is, the less room there is for a tax which will reduce both prices. But it is to be remembered that even a small tax on gross receipts may amount to a heavy percentage of net receipts. And when the law of increasing or of decreasing returns prevails, and still more when there is correlation between the two costs of production, the influence of cost may well improve the chances of the phenomenon occurring.

Lastly, let us retract the assumption which we made at the outset, that $\frac{d^2U}{dx dy}$ was a (negative) constant; and restore the more general supposition that

this expression is a function of x and y such that $\left[\frac{d^2U}{dx dy} \right]_{x=r', y=y'}$ is negative, and also satisfies condition (3). There seems to be no reason for expecting that this general case will be less favourable to the phenomenon than the simpler case which we have hitherto considered. Rather, the widened range of possibilities renders more probable each of the opposite extremes (cp. above, p. 300), that the consumers should be considerably benefited, or extremely burdened.

Altogether the phenomenon in question appears to be quite possible, though far from probable.

F. Y. EDGEWORTH

(To be continued.)

THE NEW OLD AGE PENSIONS ACT IN FRANCE

By the Act of April 5th, 1910, the entire question of old age pensions for industrial labour, agricultural labour, trade employees, domestic service, liberal professions, and such State service as had hitherto not been pensioned, has been dealt with. Under it, workers are divided into two great categories: wage-earners and non-wage-earners. Compulsory insurance is decreed in the case of the former, in consequence of their slender resources, their dependence on a master, and the inadequacy of their moral and economic education. The latter, their situation being the inverse of that of the former, may be insured if they will. Legislators reckoned that compulsory providing was necessary in the case of workers who were not earning more than 3,000 francs (nearly £120) a year, and who, hitherto, if in pecuniary straits, could claim relief from the Act for compulsory assistance of July 14th, 1905. On the other hand, it was placed within the power of small employers, small cultivators, farmers, *métayers* working usually on

their own account unaided, or with only one labourer, and with their own families, whether these received wages or not, to insure themselves at will. The same provision was applicable to any member of their families, to wives and widows, earning no wage, of those who came under compulsory or optional insurance, and also of wage-earners whose earnings amounted to between 3,000 and 5,000 francs annually.

It is estimated that out of the French active population of 20 millions, there will be $11\frac{1}{2}$ millions sharing in compulsory insurance and 6 millions in optional insurance.

The pension is in principle an old age pension. The Act takes account of pensions for other forms of physical disability only in exceptional cases. It is applicable only to absolute and permanent disability, not to that which is partial and temporary.

The age entitling to a pension is fixed normally at sixty-five years. It may be lowered to fifty-five years at the request of the insured party. In that case the pension is liquidated in anticipation.

The pension is formed (1) by contributions, compulsory or optional, from the insured persons; (2) by contributions from employers; (3) by State subsidies.

1. Compulsory contributions from the insured amount to 9 francs per annum from men, 6 from women, 4.50 francs from minors under eighteen years old. Or, if reckoned by the working day, 3, 2, and $1\frac{1}{2}$ centimes respectively. An equal rate of contributions is levied from employers.

The sums from both these sources are capitalised to form a pension, and the grant from the State is added to it. This consists normally in an annual grant for life of 60 francs. To establish a claim to this, the insured claimant must have subscribed for at least thirty years, his quota amounting to a minimum of 270 francs, in the case of a female to 180 francs. This is on the assumption that the individual has not been employed under eighteen years of age. If he was employed younger the annual contribution is reduced to 4.50 francs. If he has put by for under thirty, but for more than fifteen, years, the annual life-grant is assessed at 1.50 francs for every annual contribution.

The Act provides for all who, in taking advantage of it, are already advanced in years when it comes into full effect, as follows:—Since, in their case, the contributions of employed and employer cannot raise an adequate pension, the Act provides this through State grants. In affecting this, the insured are divided into four categories, according to age at time of insuring: (1)

those aged thirty-five to forty-five receive the life-grant of 60 francs if they have made all the deposits required for their age, and if they have been in receipt of wages during three years before the law took effect. (2) Those aged from forty-six to sixty-four need only to have paid in a minimum number of deposits, *e.g.*, in the case of one aged sixty-four, one single deposit. Now the intention of the Act is that the pension shall never be less than 100 francs a year. Moreover, it admits that, from forty-six to sixty-four years of age, the pension supplied by the contributed deposits shall be between 38 and 2 francs. Hence it judges that the State grant will vary according to age, from 62 francs ($=100 - 38$) to 98 ($=100 - 2$). (3) Those aged from sixty-five to sixty-nine years, as soon as the law comes into force, are classed, if they are reckoned as indigent, with persons of seventy years of age. To these the Act of July 14th, 1910, for compulsory relief grants a subsidy. But those so classed obtain only the half of the normal grant. (4) Those of seventy years obtain, if reckoned as indigent, this relief subsidy.

The wage-earners' contributions are deposited by the wage-payer out of the wages owed, at each wage-disbursement. A card is given gratis to each person insured, to which the employer affixes a stamp representing the total contributed by both master and man.

2. *Optional Insurance.*—Those who thus insure themselves have to deposit annually from 9 to 18 francs. *Métayers*, being somewhat in the position of wage-earners, need only deposit 6 to 9 francs, the proprietor of the soil contributing a similar amount. The State grant, instead of being added to the sum resulting from the invested deposits, consists of a proportional bonus, equal to a third, on each annual deposit. Thus it is invested with the deposits, but ceases when the capital has produced a pension of 60 francs at the age of sixty-five.

During the first years under the Act, those optionally insured are subsidised by the State at special rates. Of these the most noteworthy is that accruing to agriculturists, artisans, and small masters, over forty years of age. These are provided for as follows:—The Act assumes that, from his fortieth birthday till the law took effect, the State has paid 9 francs annually into the account of the person insured. These supposititious contributions would have produced a pension which the State is prepared to make good.

Grants in case of decease.—If one who is insured dies before touching a pension, but after he has contributed three-fifths of the requisite deposits, his heirs receive the following grants:—

Three or more children under sixteen	... ..	50 francs a month for 6 months, <i>i.e.</i> , 300 francs.
Two children under sixteen	...	50 francs a month for 5 months, <i>i.e.</i> , 250 francs.
One child under sixteen	...	50 francs a month for 4 months, <i>i.e.</i> , 200 francs.
Widow without children	...	50 francs a month for 3 months, <i>i.e.</i> , 150 francs.

The widows, French by birth, of foreign wage-earners may obtain this assistance by becoming naturalised, together with their children, in the year of their husband's decease.

Special cases.—(a) When the pension, in the course of acquisition, exceeds 180 francs, the person insured may at any time, and after medical examination, transfer the surplus capital, either into a life insurance, or to the purchase of land or a dwelling, which then becomes an inalienable homestead.

(b) No exception is made in the case of foreign wage-earners working in France, but they only benefit by employers' contributions and State grants if international treaties guarantee to the French equivalent advantages abroad. The employers' contributions are paid, otherwise, into a reserve fund.

Insurance Agencies.—The agencies for distributing pensions are the National Bureau for old age pensions, the pensions bureaux of firms and of trade unions, bureaux of underwriters in which the affiliated heads of firms are mutually dependent, friendly societies, societies for mutual aid, and trade unions. The investing of the funds at the disposal of these agencies is carried out by the deposit and consignment office in a manner regulated by the Act.

Mutual aid societies are allowed special indemnities in the event of their undertaking the banking of subscriptions, the administration of funds, and the disbursement of sickness insurance.

Results.—It has been estimated that a pension might amount—

To 414 francs in compulsory insurance at 9 francs a year, with a similar amount paid in by the employer;

To 215 francs in optional insurance at 9 francs a year, without any contribution from an employer.

The number of pensions in the first year will only be about 500,000, but in due lapse of time it will attain to over 2½ millions.

The charge on the State will be 138 million francs for the first year, and after that on an average 120 millions.

MAURICE BELLOM

SOUTH WALES COAL TRADE

THE new wage agreement continues in force from April 1st, 1910, until March 31st, 1915, and thenceforth until either party gives to the other three calendar months' notice terminating the same. There are two clauses of general interest.

(1) That the minimum shall be 35 per cent. when the price of large coal is 12*s.* 5*d.* or below. That when large coal is 14*s.* per ton f.o.b., the percentage shall be 50 per cent., and this percentage shall continue until the price reaches 14*s.* 9*d.*; above which point the men may claim advances up to 60 per cent., which shall be the maximum. In going up, 50 per cent. shall be equal to 14*s.* 9*d.*; in coming down, 50 per cent. shall be equal to 14*s.*

This minimum of 35 per cent. at the equivalent selling price of 12*s.* 5*d.* per ton is practically on a par with the previous minimum of 30 per cent. at 11*s.* 10*d.* per ton. Should coal prices at any time fall below 12*s.* 5*d.* per ton, the workmen will have the advantage of about 5 per cent. over the previous minimum. Again, if trade remains good and prices keep well above the minimum, the concession to the owners of no wage percentages to pay between the prices of 14*s.* and 14*s.* 9*d.* per ton on the selling price of coal will be an inducement to the coal-owners to maintain prices about this level. In this case the workmen will secure a practical minimum of 50 per cent. It will be interesting to watch the course of coal prices during the next few years, and to trace how far the coal-owners will be able to keep the market prices at about this level, which gives them such material concessions in wages cost.

Should the coal-owners succeed in this the workmen would suffer a net loss of about 6½ per cent. on wages when prices ranged between 14*s.* and 14*s.* 9*d.* per ton; they would also lose the percentages which would accrue to them on every further increase in price of coal which would take place, but for the deliberate efforts of coal-owners to keep prices down to 14*s.* to 14*s.* 9*d.* per ton. Consumers, of course, would benefit thereby.

The miners would also benefit in steadier employment, due to the increased demand for coal which these lower prices would create. But the coal-owners would further benefit in extra profits made on an increased output on lower fixed costs. The coal-owners, with every prospect of a period of good trade, will thus secure material advantages under this clause.

The other important clause in the agreement provides for an

overlapping shift of coal-hewers where required by the owners. This clause is a compromise between the original demand of the employers for a double coal shift and that of the miners for a single coal shift as heretofore. The Welsh miners strongly resent a double coal shift on the grounds that it would alter their home and social life for the worse, increase the dangers of working in the fiery Welsh mines, and tend to glut the market with an overproduction of coal with consequent lower prices and lower wages. One can do no more here than state that these objections are all sound and cumulatively decisive against the introduction of the double coal-shift system in South Wales.

It is interesting to note that, for the first time in wage negotiations in the Welsh coal trade, the miners decided not to ratify any wage agreement until it had secured the sanction of a majority vote by ballot of the adult miners. This new feature is significant of a new spirit which is coming over the workmen in labour questions. It is a spirit of unrest with the older methods of wage negotiations, and a groping after something newer and more drastic as an instrument of wage betterment.

At the outset this spirit of discontent gave little promise of a settlement. Even when the employers issued their final proposals as an ultimatum, the Welsh miners were in no mood to accept them. They called upon the Miners' Federation of Great Britain to put the twentieth rule into operation, *i.e.*, to call out all the miners of Great Britain in a sympathetic strike. Such a national stoppage of the collieries would have instantly paralysed national industry. The M.F.G.B. refused to accede to this request. They did so on the grounds that as the owners in their final terms made no attack on the minimum standard of wage percentages, the remaining differences were of a local character and did not warrant national action; and as a sectional strike would be non-effective, they advised the Welsh miners to accept the owners' terms. Thus the miners, with a bad grace, decided by a large majority to accept the said terms.

But discontent remains strong, and in all probability serious disputes will arise in various parts of the coalfield with regard to certain wage conditions which are not remedied in the new agreement. These are (1) a fixed wage to coal-hewers employed in abnormal places, and (2) a minimum wage of 3s. 4d. per day plus percentages to every datal adult worker in and about the mine. Under the first head several thousand skilled miners, on average, are paid wages much below the average wages skilled miners can earn in a normal workplace. A workplace is

abnormal due to physical disturbances in the coal-seam which are beyond human control. At present the miner is penalised for the vagaries of Nature. He contends that the extra working costs involved should be borne as an item in cost of production, and not be taken out of the miner in lowered wages.

This, and the low wages paid adult datal workers, are two acute grievances which the M.F.G.B. will seek to settle satisfactorily on a national basis, as the grievances prevail in all our coalfields. The next wage crisis which may arise when the next wage agreement in any British coalfield comes to be made, I predict, will centre around these two grievances.

T. I. MARDY JONES

Report of an Inquiry by the Board of Trade into the Earnings and Hours of Labour of Workpeople of the United Kingdom.

III., Building and Woodworking Trades in 1906. (Cd. 5086 of 1910. Price 1s. 10d.)

THE group of trades with which this volume deals differs in many ways from the Textile and Clothing groups previously dealt with. The numbers employed are very much larger, especially in the case of men, and the Building trades alone employ more men than any other group, agriculture alone excepted, namely 1,123,418 in the United Kingdom, and nearly 950,000 in England, according to the 1901 census. Of these nearly one million are wage-earning males, the report states—bricklayers, masons, and their labourers accounting for one-third, carpenters and joiners for another, and painters, decorators, and glaziers for one-sixth, and other important groups are plumbers, plasterers, and builders' labourers. For the other branches the census of 1901 gives a total of 97,680 engaged on Works of Construction and Roads (other than Buildings) in England and Wales, and 233,000 in the Woodwork and Furnishing group; but the latter includes some branches with which this inquiry has not dealt. In the building trades 5,000 employers made returns embracing 118,552 workpeople (about 12 per cent. of the wage-earners), composed of 101,786 men over twenty years of age, and 16,766 improvers and apprentices of all ages, and lads and boys under twenty. Of these returns the report states:—"Compared with other trades for which particulars of earnings have been obtained, the proportion is low, but this fact does not seriously affect the value of the results, since, owing to the standardisation of conditions in

the building trades, a relatively small number of returns drawn from the town or district is usually found to be fairly representative of local conditions; and, moreover, the returns are representative of all parts of the United Kingdom."

In the construction of harbours, docks, etc., returns covered 10,432 men and 482 boys, of whom 6,378 were excavators and labourers; in the sawmilling and machine joinery group, 19,785 men, 5,886 apprentices and boys, and 1,119 women and girls; and in the cabinet-making and allied trades 16,892 men, 4,786 apprentices and boys, and 2,537 women and girls. Some trades appear in more than one group.

These trades have some special features. Comparatively few women are engaged in them, and it is only in the sawmilling and cabinet groups that they are found at all. Only in wooden box and bobbin making are they engaged in an appreciable proportion, and a small but increasing number are working as upholsterers, sewers, and polishers. There are practically no half-timers. Thirdly, payment by time is almost universal in the building trades, in construction and in sawmilling the proportion of piece-workers was barely 10 per cent.; and only in the cabinet-making group was it as much as 20 per cent., rising to about one-third of the cabinet-makers and upholsterers.

As regards employment, these trades suffer considerably from seasonal fluctuations, which take effect in various ways, by causing dismissals, by short-time, and so on. The building and constructional trades adopt a short winter week, but the others do not. "Broken time," also, results from weather conditions in the outdoor trades. Moreover, in building and construction employment is largely casual, nor is casual labour uncommon in the other groups; whilst the long-continued depression of recent years has tended to produce a permanent surplus of unemployed. Thus allowance for all these influences is necessary in calculating average earnings.

The report dealt with the year 1906, and obtained the following particulars:—First, the number of workpeople working full time and the amount of wages paid them in a given week; and secondly, the number of, and the wages paid to, all workpeople engaged, whether working full time or not. From this average full-time earnings and average actual earnings were calculated on an average summer week in building, and for the last pay week in September in the other trades concerned; and thirdly, annual earnings were obtained by getting the numbers employed and wages paid for the last full week in each month, and the total

wages paid for the year. From this the average yearly earnings were calculated by dividing the total wages-bill by the average number employed in these twelve weeks. A second estimate is obtained from the average earnings in a given week, with allowance for holidays and short winter hours.

In the building trades average earnings for the given week for workpeople on full time and for all workpeople were :—Men 33s. and 31s. 6d., lads 9s. 7d. and 10s. 3d., and all employés 28s. 1d. and 28s. 6d. They were far higher in London, and far lower in Ireland, than elsewhere; Scotland, the Northern Counties, and Lancashire, Yorkshire, and Cheshire show the highest full week's wage after London. Hours of labour averaged 52·9, being lowest in London and the North, highest in the Midlands and South. Wages averaged nearly 5s. a week more for about 2½ hours less in the towns of more than 100,000 inhabitants than in those with less. There may have been some duplication in estimating all earnings from men working for two employers in the week; but this cannot be eliminated. The proportion of men was greater in the total number of workpeople than in those working full time; hence the average wage for all workpeople is higher than for full-time only, though the wage of men is considerably lower. The same phenomenon is found in other groups. Average wages for skilled men are 36s. 4d. for 52·8 hours, and for labourers 24s. 5d. for 52·9. The high wages for improvers in London raises the average of boys there to 15s. 9d. per full week.

Holidays average about nine days in the year, and the weekly reduction of winter hours about seven for 14 weeks. Given as percentages of the average number, maximum and minimum numbers employed vary as 105 to 92; but the real fluctuation is somewhat larger, as local fluctuations neutralise one another to some extent. There is a further monthly fluctuation of average earnings, which are largest in May and August, lowest in the winter.

Average yearly earnings, calculated by dividing the total wages-bill by the average number employed, amounted to £68 per man (larger towns £75, smaller £62). By the other method, 1·9 weeks were deducted for short winter hours, and 1·5 for holidays, and annual earnings worked out at 48·6 times the average weekly rate, or £69 10s. The difference is probably accounted for by the greater amount of "broken time" in winter. Compared with 1886, standard wages show a rise of 18 per cent. Similar figures are not given for the other groups of trades. These estimates only give average earnings per man engaged, allowing for

short and lost time ; but from the circumstances it was not possible to make allowance for time lost by complete unemployment.

In the constructional trades earnings (full time and for all workpeople) were :—Men 31s. 10d. and 26s. 5d., lads 13s. 6d. and 13s. 1d., or in all 30s. 11d. and 27s. Average hours were 55·8 summer and 50·3 winter (15 weeks). The best-paid workers were mostly building-trade mechanics. Full-time earnings for excavators and labourers were 24s. 9d. (time) and 33s. 2d. (piece) for summer hours (55·7), and for carters 24s. 9d. Yearly earnings averaged £64 10s. by either method, and maximum seasonal variation was just over 20 per cent.

In the sawmilling group average wages (full-time, and all employés) were :—Men, 33s. 6d. and 33s. 1d. respectively, lads and boys 9s. 8d. (for both), women 12s. 5d. and 11s. 7d., girls 8s. 4d. and 7s. 10d., and all workpeople 22s. 4d. and 22s. 7d. Men's wages were far higher in London, and far lower in Ireland, than elsewhere in the skilled trades, being highest with joiners (34s. 11d.), and lowest with mill sawyers, 26s. 11d., and turners on time work 24s. 2d. Members of this trade were largely engaged in Yorkshire and Lancashire bobbin factories. General labourers averaged 20s. 11d. Hours of labour were 54·4, more than one-third of the workpeople working from 54 to 56. London hours were the longest. Yearly earnings averaged £55 10s. by the first, and £56 10s. by the second method. The greatest seasonal variation was less than 3½ per cent.

Finally, in cabinet-making average, full-time and all, earnings were :—Men 33s. and 32s. 1d., boys 8s. 7d. and 8s. 10d., women 13s. 1d. and 13s. 9d., and girls 6s. 2d. and 6s. 1d., or in all 24s. 5d. and 25s. 3d. Men's full-time earnings were 1d. higher in the Northern Counties (36s. 10d.) than in London, and for all men employed were nearly one shilling higher, largely owing to high rates for skilled men in Newcastle and Sunderland. Average hours were 53·1 for all districts, three-quarters of the workpeople returned working between 50 and 56. There is a considerable amount of piece-work in these trades, but wages of time-workers are usually highest, partly because the best work is usually done on time, and partly also because the better conditions are usually found in time-working shops. For the chief trades, time wages were :—Cabinet-makers 34s. 5d., French polishers 33s. 4d., carvers 36s. 2d., upholsterers 34s. 9d., and chair-makers 31s. 11d. Average earnings amounted to £62 and £63 10s. respectively. The seasonal variation is about 7·3 per cent.

The report has been very well written and contains a mine of information upon a variety of subjects, such as seasonal variations in employment, boy labour, and so on. A very interesting comparison is that of the proportion of workpeople earning above and below certain rates of wages in each trade. The summary tables are wonderfully complete, and altogether the Board of Trade is to be congratulated.

N. B. DEARLE

Census of Production (1907). (Cd. 5162. Price 7½d.)

THIS is the third of a series of preliminary tables giving the results of Returns received under the Census of Production Act. It is stated that "whilst the figures now published are subject to revision at a later date, they are probably sufficiently close to the final figures to afford a good indication of the quantity and value of the principal products of the industries to which they relate." The industries covered by these tables are numerous, including textile manufactures other than cotton and woollen, bleaching, dyeing and finishing works, chemicals, soap and candle, paint and varnish, seed-crushing and oil, fertiliser, glue, match, ink, gum and sealing wax factories, salt mines, brine pits and salt factories, china and earthenware, brick and fireclay works. The average number of persons employed in these industries was over 650,000 (exclusive of out-workers), and the "net output" nearly £60,000,000.

The "net output" is "the result of deducting the total cost of materials used and the amount paid to other firms for work given out, from the value of the gross output," for each industry or group of factories. "This sum constitutes for any industry the fund from which wages, salaries, rents, royalties, taxes, depreciation, and advertisement and sales expenses, and all other similar charges as well as profits have to be defrayed." Naturally there are very wide differences between the "net output" per head in different industries, for not only do wages vary, but the proportion of men to women and children, of wage-earners to salaried persons, of persons employed to the capital employed, and of expenses of sales and advertising to the wages bill, vary widely. The lowest "net output" per head is shown by Flax Scutching Factories (£18), and the highest by Ink, Gum, and Sealing Wax Factories (£318).

For some of the largest groups of industries the summarised results are as follows:—

	Gross output. Selling value or value of work done.	Materials used. Cost.	Work given out. Amount paid to other firms.	Net output. Ex- cess of column 1 over columns 2 and 3.	Persons em- ployed (except outworkers).	Net output per person employed (excluding out- workers).
	(£1000's)	(£1000's)	(£1000's)	(£1000's)	Total.	
Jute, linen and hemp fac- tories (Great Britain, ...	18,667	13,479	168	5,020	81,703	61
Linen and hemp factories (Ireland)—						
Spinning departments.	5,773	3,139	13	2,621	38,195	69
Weaving "	6,093	4,663	54	1,376	29,797	46
Making-up "	1,265	897	47	321	3,769	85
Hosiery factories ..	8,689	5,370	325	2,994	47,939	62
Silk factories ..	5,204	3,318	136	1,750	32,036	55
Lace factories and ware- houses ..	10,003	6,325	296	3,382	34,583	98
Bleaching, dyeing, printing and finishing factories and workshops.....	17,732	7,172	241	10,369	102,311	101
Chemicals, coal-tar pro- ducts, drugs and perfum- ery factories and work- shops ..	23,447	13,974	9	9,464	51,088	185
China and earthenware fac- tories and workshops.....	7,534	2,854	84	4,596	67,870	68
Brick and fireclay factories	7,703	2,643	—	5,060	63,287	80

The various difficulties which have arisen are discussed in the text, and, so far as practicable, comparison has been made of the quantities produced, exported and imported. "Manufacturers in the jute, linen and hemp trades in Great Britain were asked to furnish information regarding their output in the form generally adopted for the purpose of the Census. That is to say, they were asked to consider their business as a whole and to give particulars of their output at the stage at which it was either sold or warehoused; thus a spinner who also wove piece-goods from his own yarns would show his output of piece-goods and the yarn which was either sold or warehoused as such, but not the yarn woven by him into cloth" (p. 6). Hence it is not possible to say with certainty how much yarn was spun in Great Britain, but an estimate is made on the basis of replies to a voluntary question. For Ireland, separate returns were obtained for each department of the business, at the request of a Committee appointed by the Belfast Chamber of Commerce to assist the Board of Trade in the preparation of the schedules. The chemical industry is a particularly complicated one, including a number of articles, the total production of which cannot be stated with certainty. Thus "the entry against sulphuric acid does not include acid used in further manufacture by the same firm that

made it, but only acid made in the year, and sold as such or remaining in stock at the end" (p. 4).

It is owing to difficulties of this kind that comparisons of home production with exports and imports cannot be made in all cases.

C. F. B.

OBITUARY.

THOMAS SCOTT CREE, LL.D.

By the recent death of Mr. Cree economic science has lost an economist of a specially valuable type, one who looked at economics with the eyes of a practical business man, and made its influence felt in business circles.

Thomas Scott Cree was born in 1837. Entering business at an early age, he was mainly self-taught, and till, in 1905, Glasgow University crowned the recognition of his economic work, already accorded by some of the greatest economists, British and foreign, by conferring an honorary degree, he belonged to no academic body. His educational deficiencies, which he freely admitted, were compensated by an unusually varied business experience and a power of making the most both of his experience and of his reading.

He embraced, with a thorough-going sympathy and comprehension, both now rare, the "orthodox" mid-nineteenth-century economics, whose predominance has been so well described by Professor Ashley.¹ Whether or not its presuppositions were adequate, it was at least a coherent system, well calculated to appeal to a logical mind. Professor Ashley admits that no new synthesis has yet replaced it. With more recent developments he made himself less familiar, partly from want of leisure, partly from the conviction that central truths had been, to some extent, lost sight of in the elaboration of qualifications and exceptions. We could not see the wood for the trees.

A newspaper recently stated that whereas the watchword of Leopold I. was "Production," that of Leopold II. was "Markets." This well expresses Mr. Cree's standpoint. He used to say that there were two economics, the economic of plenty and the economic of scarcity. To the second belonged all protectionisms, trade union restraints, lump of labour theories, and theories which lay

¹ In his Presidential Address to the Economic Science and Statistics Section of the British Association for the Advancement of Science, at Leicester, 1907, reprinted in the *Economic Journal*, December, 1907.

stress on demand or consumption or spending power. No class, he held, could permanently benefit except from what increased the sum total of wealth, and if that were increased, no power on earth could prevent every class, and especially the working class, from getting its share. The economic problem was entirely or primarily one of production, only secondarily or not at all of distribution. In fact he grasped the great open secret of all sound economic and political thinking, that the sum of good in the world is not a fixed quantity, and that the interests of different countries and different classes are in the main not opposed but identical.

All his life he was an indefatigable controversialist, both in letters to the press characterised at once by an unflinching application of economic theory and by a happy knack of making the exposition concrete by illustrations drawn from his business experience, and in private correspondence with economists and public men whom he sought to influence. But he is best known for his work on trade unions.¹ This is not the place for a discussion of his thesis. Professor Ashley admits² that the question whether trade unions can raise the general rate of wages is an open one, and it is easier to cavil at Mr. Cree's conclusion than to refute his arguments.

Personally Mr. Cree was (like many "orthodox" economists) the kindest of men, and emphatically a benevolent employer. An *employé* said that his men "always got what they wanted" from him. Nor was this mere amiable inconsistency. His theories give every scope to the exercise of voluntary benevolence.

Whatever the final verdict on Mr. Cree's economic work, at least his views are well worthy of a respectful hearing, and the death of one who enforced them with such courage, resourcefulness, and fairmindedness, who, as has been well said, never declined a challenge or lost his temper, one, too, who has left no successor, is a unique and irreparable loss.

A. A. MITCHELL

¹ *A Criticism of the Theory of Trades Unions* (Economic Science Section of the Royal Philosophical Society of Glasgow, 12th November, 1890), *Evils of Collective Bargaining in Trades Unions* (Civic Society of Glasgow, 20th January, 1898), and *Business Men and Modern Economics* (British Association at Glasgow, 16th September, 1901)—all published by Bell & Bain, Limited, 41, Mitchell Street, Glasgow. The same line of argument is pursued in a Memorandum on the Causes of Unemployment which Mr. Cree prepared on the invitation of the Royal Commission on the Poor Law.

² *Loc. cit.*, p. 480.

SIR ROBERT GIFFEN.

IN paying a tribute to the memory of Lord Goschen three years ago in the *ECONOMIC JOURNAL*, Sir Robert Giffen used words which have now become applicable to himself. "By his sudden death . . . the country, it is universally recognised, has to mourn a heavy loss. In this mourning the Royal Economic Society is specially called on to join, not merely on account of his official position in connection with it, but because of the illustration given by his whole career of the value of economic and statistical studies."

Sir Robert Giffen was not merely a Vice-President of the Society. He was one of its founders, and one of the most constant contributors to its *JOURNAL*. He took a leading part in those preliminary councils by which the constitution of the nascent Association was shaped. His contributions to the *ECONOMIC JOURNAL* extend over the twenty years of its existence, from the first volume, 1891, to the very last number, March, 1910. But for the disaster of last April the present, the June, number would have been no exception, and on this very page, now consecrated to melancholy retrospect, the reader's eye would have been met by *City Notes*, "received from R.G."

Much as we have received, it is but a fraction of what Sir Robert has contributed to periodical literature dealing with Economics. As he himself tells us in the preface to his work on *Stock Exchange Securities*, he had been for eight years, between 1868 and 1876, connected as editor and contributor with important financial journals. The *Times* and the *Daily News*, the *Spectator*, have all been largely indebted to him. He was Assistant Editor of the *Economist* for several years. He took part in founding the *Statist*, to which, under the pseudonym "Economist," he contributed, in 1886, some articles setting forth a scheme for buying out the Irish landlords, which anticipated the measure of 1903. It would be interesting to select, from a variety of periodical publications, the principal articles due to his pen; for instance, from the *Economist*, one in which he, among the first, we believe, noted the turn of the monetary tide, the incipient fall in the level of prices which took place in the 'seventies. Till such selection shall have been accomplished it would be premature to attempt here a complete enumeration of Giffen's writings.

This unparalleled success in what may be called economic journalism strikingly exemplifies the irresistible force of special talent. Circumstances had not been particularly favourable to a

career requiring so much preparatory study. Some of the best years of Giffen's youth were spent in a solicitor's office at Glasgow, where he held a subordinate post during the early 'fifties. He must have entered the office as a very young man, for he was born in 1837.

Perhaps the struggles of his early life, perhaps simply its date, may account for an element in the thought of the mature economist which may be described as Ricardian. His bias was towards *laissez faire*, whether in the trade with foreign countries, or in the labour market at home. Like the leading modern school of the French economists, he opposed both Protection and Socialism. Like one of the greatest among them, he thought that if it was necessary to choose between two evils, Protection was the less. Such seems to be the gist of almost his last public utterance, the letter to the *Times* of January 17th, 1910.

But Giffen is not to be included in the straitest sect of individualists. Even as a Free Trader he was not wholly uncompromising; and he dwelt more on what he called the "negative" argument—the impossibility of proving by statistics Protection to be either good or evil—than is agreeable to extreme Free Traders. He did not scruple in 1903 to recommend (in the *Nineteenth Century* for July) a tincture of preferential dealing with the Colonies, for political purposes. He adopted (in the memorandum contributed to the Local Taxation Commission) as the first principle of taxation, "equal sacrifice," in a sense which would not be acceptable to M. Leroy-Beaulieu. That this confession of fiscal faith was not an empty profession is shown by his hardy proposals with respect to the Financial Relations between Great Britain and Ireland. He would tax the richer country out of proportion to its income, apparently on the principle which underlies the doctrine of equal sacrifice: as Mill says, with reference to that doctrine, "not on grounds of arithmetic but of human wants and feelings."

Altogether Giffen seems to deserve the distinction which is thus bestowed on him by Thorold Rogers in his racy *Economic Interpretations*: "The student who is anxious to go beyond the common chatter of text-books and manuals, will learn more and better political economy from Mr. Giffen's essays than he would if he browsed for ever on the thorns and thistles of abstract political economy."

Common sense, rather than abstract reasoning, may be assigned as the especial excellence of Giffen's economic work; if

it is remembered that common sense in a subject like political economy prescribes attention to general reasoning.

Common sense is also a conspicuous trait in the character of Giffen as a statistician. No one has more effectually set forth what he called "the utility of common statistics." As a specimen of his art in rendering popular a science which some suppose "harsh and crabbed," we may refer to the article on *International Statistical Comparisons* in the ECONOMIC JOURNAL for 1892. It may be hoped that the Handbook of Statistics which he was preparing has been left in a sufficiently mature condition to admit of publication. It is sure to be a most useful instrument of education.

Besides the art of pointing out the truths of statistics, invisible to the majority who do not know where to look for them, Giffen had the still rarer faculty of discovering those truths. His power of penetration and discernment is attested in the following description of his method of working which has been communicated by one who was associated with him in the work of the Board of Trade:—"I think that one of the features of Sir Robert Giffen's work which impressed me most was its extraordinary rapidity and certainty, whether he were piercing to the heart of a complicated mass of statistics and extracting their real significance, or whether he were composing the luminous and original memoranda, which he tossed off at lightning speed with little apparent effort. He had an almost unique power of carrying his statistics in his head; they were always at his command, and he was never overwhelmed by them. In the most complicated mazes of figures he never lost his grip on the realities for which the figures stood, and he never seemed to lose his bearings or his fine sense of proportion."

In so far as the statistician explains facts and infers laws, his method is that of Inductive Logic. What is peculiar in the Logic of Statistics is its affinity to the Theory of Probabilities. How far did Giffen recognise and utilise this peculiarity? We can answer in the words of one who is among the highest authorities on the application of the mathematical theory of error to practical statistics. "With an acute perception of the things that were not measured or unmeasurable, he [Sir Robert Giffen] first surrounded the official statistics with an atmosphere of caution, and then cleared away the mist by the use of bold estimates. For these estimates he had an arithmetical sense almost amounting to genius, a feeling for the probable error of the factors used, and a courageous rejection of measurements where the inaccuracy

was too great. He had an intuitive feeling for the relative importance of numbers. He used to express his conclusion as to the adequacy of the data by saying he could, or could not, 'give a figure.' He appears to have had little or no knowledge of the modern mathematical theory of statistics, but his arithmetical sense was so strong that he was able to proceed safely and with knowledge through calculations whose validity could only be established mathematically."

These characteristics are well exemplified in some of Giffen's classical investigations: on the growth of national capital, on the progress of the working classes, on the variation in the volume of trade and the value of money in relation to articles of trade.

Giffen did not act upon the original, too self-effacing, motto of the Statistical Society, *Aliis exteendum*. Yet he did yeoman's service in gathering in the harvest of facts, through the improvements which he introduced in the compilation of statistics during his tenure of office at the Board of Trade (1876-97). The Labour Department, now so highly developed, owes much to his initiation. Office, which has been said to show what a man is, brought out Giffen's virtues. We may again cite the evidence of the high official to whom we have already referred:—"I cannot speak too cordially," he writes, "of the invaluable guidance and advice which Sir Robert Giffen gave me from the beginning, when I was new to official life, up to the time when he quitted the office. Giffen as an official was the kindest and most considerate of chiefs, and the most appreciative of colleagues."

Similar feelings of grateful remembrance are cherished by others who have been associated with Sir Robert in other kinds of work—in particular that of the Economic Society. The blow which falls as an irreparable calamity on his home is also deeply felt throughout the wide circle of his friends. In the clubs which he frequented his kindly presence and genial talk will long be missed.

Would the reader contemplate the outward semblance of the man, as well as the traits of his intellect and character? An excellent photograph accompanies the appreciative memoir in the Journal of the Statistical Society. That Society has a precedent for perpetuating the likeness of one who has conferred honour on their Body. The Society treasures—not, indeed, in its Journal, but on its walls—the portraits of Tooke and Porter and other mighty ones of the nineteenth century. Giffen deserves to be honoured with the masters of Statistical Science.

CURRENT TOPICS.

THE Government's schemes for insurance against unemployment and invalidity give special interest to the forthcoming meeting of the International Congress on Social Insurances, which is to be held at The Hague from September 6th to 8th. Sir Edward Brabrook and Mr. Geoffrey Drage have been appointed to form a national committee for Great Britain. They ask for reports from economists, and other competent persons, on the following questions :—(1) the contribution of the State to old-age and invalidity pensions; (2) the organisation of medical service in social insurances; (3) the extension of social insurance to new classes of beneficiaries; (4) assurance for widows and orphans; (5) assurance against unemployment. The subscription to the Congress is 15 francs, but an addition of 5 francs will obtain the privileges of the Congress for any member of the subscriber's family who may wish to attend. Entertainments will be offered to the Congress by the Government and municipality, and reductions in railway fares will be arranged. Communications may be addressed to Sir Edward Brabrook, 1 Garden Court, Temple.

ACCORDING to the Report of the Union of German Labour Exchanges there were last year 462 public Labour Exchanges in Germany. They found work for 943,981 applicants. The number of skilled workmen for whom work was found exceeded the number of unskilled by 16,000—a fact which, it is argued, contradicts the view which has been expressed that the exchanges were only useful to the unskilled.

THE co-partnery scheme inaugurated by Sir Christopher Furness at Messrs. Irvine's ship-building works, West Hartlepool, has broken down on account of the opposition of the workmen. A vote as to whether the scheme should be continued or not was taken among the co-partner employés, and it was rejected by 598 votes to 492. There appear to have been two chief reasons for the dissatisfaction which led to this result. The first was that there has been much less than a full year's employment for most of the men, and the lower paid of them have, during periods of stress, grudged the amount invested in shares. The other was the hostility of many unionists outside the works, which prevented the co-partners from obtaining employment in other local yards. The reasons for this hostility were explained in interviews by Mr. G. N. Barnes, M.P., the Chairman of the

Labour Party, and by Mr. Keir Hardie, M.P. Mr. Barnes argued that the movement was not consistent with the principles of trade unionism, because it would have had the effect of isolating the men in Hartlepool from their fellows. The effect of such schemes was, in his opinion, to split up the men into groups. He quoted the case of the South Metropolitan Gas Works as an example. Mr. Keir Hardie pointed out that in these days of the growing solidarity of the working-class movement, such schemes were doomed to failure. They would prevent workmen from acting together *en masse* in times of crisis. The division of profits, he argued, worked out in the proportion of one to labour and ten to capital, and labour was expected to earn the whole by extra exertion.

THE "National Industrial Education League" is an organisation initiated by Mr. R. Applegarth, the veteran trade union leader. The object of the League is "to give children before leaving school a sound elementary industrial training, thereby enabling them to follow the occupation for which they are naturally best fitted, and for which they must be trained by practical men with a knowledge of trade and industry." Meanwhile, the same doctrine found expression in the Teachers' Conference held at Plymouth at the end of March (*The Times*, April 1st). The conference passed a series of drastic resolutions on child labour, of which the following were the most important:—(a) No exemption (either partial or whole time) from school attendance should be granted until the age of fourteen years. (b) All wage-earning child labour out of school hours under fourteen years should be illegal. (c) Attendance at continuation schools between fourteen and eighteen should be compulsory. (d) This attendance should be accompanied by such provisions with regard to the limitation of the hours of labour for young people as to guard them against over-strain. (e) Junior employment registries should be established to give skilled advice to parents, managers, and teachers in the selection of suitable occupations between the ages of fourteen and eighteen.

THE passage of the Budget has been immediately followed by the formation of the "Land Union." The object of the Union is to "maintain the security of private property in land, which is the very basis and foundation of all business security." It will agitate for the repeal of the new land taxes. At the same time it puts forward as its constructive policy the reform of the

rating system, and the extension of small ownerships. Mr. E. G. Pretyman, M.P., is the President of the Union.

A BILL embodying the proposals of the Minority Report of the Royal Commission of the Poor Law has been introduced into the House of Commons. It came up for second reading on the 8th April, 1910, and, after speeches of a non-committal character from the Prime Minister and Mr. Balfour, was "talked out." Meanwhile the "National Committee to promote the Break Up of the Poor Law" has been formed to carry on an organised agitation on its behalf. The National Committee has now been at work for eight months, and contains over 20,000 members, among whom economic teaching is represented by Professor Macgregor, Mr. H. S. Jevons, Mr. A. L. Bowley, Mr. Pember Reeves, and Mr. Sidney Webb. It has arranged somewhat over a thousand meetings within the last five months, and issued about a score of pamphlets. During the General Election it was particularly active among the various candidates, and claims that 116 members of the present Parliament have declared themselves in complete agreement with the Minority Scheme. Their latest activity is the issue of a monthly journal called *The Crusade*. The offices of the Committee are at 536 Clements Inn, Strand, and its Honorary Secretary is Mrs. Sidney Webb. The subscription is optional, and the price of *The Crusade* is one penny.

THE general increase in the volume of employment that has been making itself slowly felt in this country for nearly a year has become more marked during the last few months, and the curve of unemployment of the Board of Trade at the end of April has at length regained a point, 4·4 per cent., that corresponds with the mean of the last ten years. One year ago the percentage of unemployment based on the same general body of returns was 8·2.

THE outlook for the near future appears to be most uncertain in the cotton industry, in which, although the harm done by recent frosts and storms in America seems to have been exaggerated, the chances of a short crop, and thus of the maintenance of a level of prices for raw material that must disturb and may hamper a great industry, are serious.

IN some slight degree the preliminary statistics of the new Board of Trade Labour Exchanges reflect the same general

improvement, the number of applications for employment received during April (116,523) and the applications remaining on the registers at the end of the month (81,523) showing a decline of about 10,000 each as compared with the March figures, while the number of vacancies filled increased by about 2,500, to 23,858. Until more is known as to the degree of permanency possessed by places filled; as to the ages of those who obtain them; and as to the suitability, in relation, as regards adults to the chief past occupation, and as regards boys and girls to the promise of satisfactory and lasting employment, it is, it is true, difficult to know what degree of importance to attach to such figures as those quoted above. But they indicate, in any case, that the Exchanges have been started under favourable industrial conditions, and that they have started hopefully.

THE usual Whitsuntide Congress of Co-operators was held this year at Plymouth, and was attended by nearly 1,800 delegates. Most of the subjects discussed were of old standing, but the Congress as a whole was another demonstration of the vitality of this great movement. On the authority of the Anti-Credit Committee a somewhat disturbing statement was, however, made to the effect that by no fewer than 71 per cent. of the distributive societies credit was being given. The grievance is an old one, and protests have been often raised, but although, doubtless, not adopted by the great majority of the members, the extent of a practice that is opposed to the principles of a movement that aims, *inter alia*, consciously and unconsciously, at the promotion of thrift appears to be still spreading, and to have reached serious proportions.

THE grave risks of a stoppage in the South Wales coal-mining fields incurred by the notice given by the men in January to terminate the agreement of 1905 on March 31st last have been averted. Independent negotiations appeared to be breaking down, and it was not until near the end of March that, following on the friendly intervention of the Board of Trade, the basis of a fresh settlement was arrived at. After a ballot of the men, endorsing the proposals by a majority of nearly 3 to 1 on a vote of more than 132,000, the new agreement was signed on April 8th. The principle of the maximum as well as of the minimum wage is again recognised; Lord St. Aldwyn will again act as Chairman when questions of general advances or reductions in wages are under discussion; and the agreement is made for five years certain or for longer unless determined by three months' notice on either side.

TRADE Union statistics for 1908 reflect the influence of the depression of that year, but although membership (slightly) and reserve funds (more noticeably) showed declines, the general figures point to the maintenance of great strength. This is perhaps best illustrated by the total income of the 100 principal unions, which reached the large record total of nearly 2½ millions, and showed an increase of nearly a quarter of a million over that for 1907. On the other hand, expenditure increased by considerably more than a million, but, in spite of this heavy drain, the funds in hand at the end of the year exceeded 5 millions, and were nearly a million and a half in excess of the reserve at the end of the prosperous year of 1909. Thus the Societies entered upon the difficult period that has just closed in a position, somewhat weakened, indeed, by 1908, but still one of exceptional financial strength.

ORGANISATION in the building-trade group showed a further decline in numerical strength through the continued depression in those industries; in mining and quarrying, an increasing comprehensiveness; and in metal, engineering, and shipbuilding, stability. The total membership of all Trade Unions was 2,378,248, a decline of only about 30,000 on the record total for 1907.

UNDER the new Trade Boards Act two interesting steps have been taken during May, (1) the issue of the proposed minimum time rates by the Chain Trade Board, and (2) the regulations for the constitution of the proposed Board in the Paper and Card-board Box Trade. The minimum time-rate provisionally announced for certain branches of hand-hammered chain-making is 2½*d.* per hour—equivalent to 11*s.* 3*d.* per working week of 54 hours. The "occupation" is followed both by men and women, and, should a time-rate be in practice adopted, the above rate is thus applicable to either sex. For women it may in the future be found to have historic importance as a first official step in the formation of that public opinion by which, in the long run, the elimination of rates which in the public mind rank as "sweated" will to a great extent have to be secured. In the above trade, however, the prevailing method of remuneration is by piece-work, and general minimum piece-work rates, establishing, it may be assumed, a normal relationship between time- and piece-rates, are therefore also being proposed by the Trade Board.

THE Chain Trade is small and highly localised, and, although even the smallest industry is apt to conceal its own intricate problems, probably, in general, presents the minimum of complication of almost any recognised trade in the country. It would thus have been difficult for an initial step under the Trade Boards Act to have been chosen, so far as the environment and organisation of the industry are concerned, of greater simplicity.

THE Paper and Card-board Box Trade will present a very different series of problems, both on account of its greater internal complexity and of its much greater diffusion. Both features are illustrated in the regulations just issued for the new Board, which is to consist of not fewer than thirty-five persons, while the sixteen members representing employers are to be drawn from those who "trade" (presumably "trade mainly") in districts as important or as far removed from each other as Cornwall and Scotland; South Wales and Lincoln; Lancashire, Yorkshire, and London. Altogether, provision is made for the representation of employers trading in nine great specified areas. The new Board will be the largest of its kind ever formed, and its record and recommendations will be followed with great interest.

THE "International Visits," for the purpose of studying the customs and institutions of other nations, which we have described in former numbers, continue to flourish. A second visit has been arranged to Holland, August 9th to 19th, 1910, when a course of lectures on Holland will be given (in English) by Dutch authorities on the different subjects in the University at Leiden. The course will include lectures on "Agriculture and Horticulture," with other subjects, by M. Bonthuis, Teacher of Agriculture under the Ministry of Agriculture, and A. J. Fokker, President of the Leiden Agricultural Society. These lectures will be illustrated by visits to co-operative dairies and cheese factories, automatic auctions, small market gardens, "polders," &c., &c. Under the head of the Labour Movement there will be lectures on "The Social Democratic Party," by Henri Polak, President of the Diamond Cutters' Union; and "Dutch Anarchists, their Principles, Organisation, and Methods," by T. Luitjes. Further particulars may be obtained from the Hon. Secretary, International Visits, Old Headington, Oxford.

THE triennial prize founded by the generosity of M. Émile Mercet will be awarded by the Société d'Économie Politique in 1913. The subject proposed for an essay is "Étude comparée du taux des tarifs de douanes dans les divers pays." The prize will consist of a gold medal, worth about 400 francs, together with a supplement (*une soulte*) in specie of 400 francs. The manuscripts should be sent, in French, to Monsieur Daniel Bellet, Secrétaire Perpetuel de la Société d'Économie Politique à Maisons-Laffitte, at latest by October 1st, 1912.

MR. GEORGE UNWIN has been appointed Professor of Economic History at the University of Manchester. Mr. Unwin was placed in the first class in Literae Humaniores, Oxford, in 1897, and in the same year was elected by Oriel College to a Travelling Scholarship, with which he went to the University of Berlin to attend the lectures of Professors Adolf Wagner and Gustav Schmoller. On his return to England in 1898 he attached himself to the London School of Economics, and began an investigation into the industrial organisation of English towns, and of London in particular, in the period which lies between the decay of the gild and the rise of the factory system. The results of this investigation were subsequently embodied in a book published by the Clarendon Press in 1904. He is also the author of *A Seventeenth Century Trade Union* (ECONOMIC JOURNAL, September, 1900); *Industrial Organisation in the Sixteenth and Seventeenth Centuries* (Clarendon Press, 1904), reviewed in the ECONOMIC JOURNAL for that year; *The Gilds and Companies of London* (Methuen, Antiquaries Books, 1908). In 1908 Mr. Unwin was elected Lecturer in Economic History in the University of Edinburgh.

THE Minto Chair of Economics in the University of Calcutta (a notice of which appeared in the ECONOMIC JOURNAL, June, 1908) has been filled by the appointment of Mr. Manohar Lal, B.A., formerly Foundation Scholar and McMahon Law Student of St. John's College, Cambridge. Prof. Manohar Lal took a first class in Part II. of the Moral Science Tripos, at Cambridge, 1903. A little later he obtained the Cobden Essay Prize. He returned to India in 1905, and lectured on economics in the Punjab University.

THE paper which Sir James Wilson, K.C.S.I., read at a recent quarterly meeting of the Royal Economic Society, "Recent Economic Developments in the Punjab," has now been printed, and may be obtained from Messrs. King (Westminster). A survey of cultivation and crops, the labouring population, and other economic features of the province shows that there has been a great increase of material wealth, and that it has been evenly distributed among the classes. The paper is enriched by three diagrams exhibiting different degrees of correlation between several important variables, *e.g.*, in Diagram I. a close similarity in the movements of the prices of four kinds of grain, *Wheat, Bajra, Gram, and Jawar.*

PROFESSOR BARON D'AULNIS DE BOUROUILL has been appointed correspondent for Holland to the Royal Economic Society, succeeding the eminent and much-regretted Mr. N. G. Pierson. Baron d'Aulnis de Bourouill has held the Professorship of Political Economy in the University of Utrecht since 1878. He is the author of several books—one on *Contemporary Socialism* (in Dutch), 1886; another on the *sugar bounties* (in French), 1899; another on the *Sugar Convention of 1902*. He has also contributed numerous papers to many of the principal European periodical publications, on questions relating to Socialism, commerce, old-age pensions, patents, and other economic topics.

RECENT PERIODICALS AND NEW BOOKS.

The Economic Review.

- APRIL, 1910. *Some Aspects of Tariff Reform.* L. L. PRICE. To study the philosophy of the fiscal question let us clear our minds of the fallacies which haunt (1) the term "Free Trade," used for "free imports"; (2) the term "natural" as a favouring description of free trade; (3) the proposition that "imports are paid for by exports"—which does not invalidate the argument that a Protective tariff may tend to make imports consist more of raw materials or unfinished goods, exports more of completed products. *Social Conditions and the Principles of 1834.* RUTH KENYON. *The Taxation of Salt in India.* D. A. BARKER. *Indian Land Tenure and the Manor.* REV. F. W. BUSSELL. A comparison between Eastern and Western "manorial" conditions.

Journal of the Royal Statistical Society.

- FEBRUARY, 1910. *Increase in the Numbers of Accidents in Factories.* H. VERNEY.
- MARCH. *Urban Vital Statistics in England and Germany.* A. W. FLUX. Many contrasts—mostly favourable to this country—are presented. *Prices of Commodities in 1909.* A. SAUERBECK. The index number for 1909 is 74; the average for 1900–1909, 73.
- APRIL. *The Financial System of the German Empire.* W. HOOPER. *The Increased Yield per Acre on Wheat.* H. D. VIGOR. *Statistics of Wages in the Nineteenth Century: The Cotton Industry.* IV. G. H. WOOD.

The Nineteenth Century.

- MARCH, 1910. *The Possibilities of an Income-tax according to the Scheme of Pitt.* W. H. MALLOCK. An increase of revenue by £12,000,000, or even £16,000,000, is easily attainable. *The Home Workers of London.* SYDNEY K. PHELPS. A lifelike picture.
- MAY. *Compulsory Insurance against Unemployment.* EDITH SELLERS. The Berne scheme proposed by Dr. Wassilieff has many advantages. *The Insufficiency of Official Statistics.* A. L. BOWLEY. Mr. Mallock's recent estimates of wages, income other than wages below the exemption limit, and other unknown quantities, illustrate insufficiencies for which a central statistical department would be a remedy. *Pitt's Income-tax Scheme.* CHIOZZA MONEY. A reply to Mr. Mallock's article in the March number.

The National Review.

FEBRUARY, 1910. *Forestry and the State.* WILLIAM DAWSON.

MARCH. *Ireland and the Budget.* T. M. HEALY. A scathing denunciation of the Budget as a tax on tenant right.

The Socialist Review.

APRIL and MAY, 1910. RAMSAY MACDONALD gives an interesting account of Peter Taylor, who, though the friend of Cobden, favoured the Crimean War.

The Clare Market Review.

JUNE, 1910. *The Organisation of Boy Labour.* N. B. DEARLE. Some employments are "blind alley," others provide a career for some of the boys who enter them. There are, too, the wasteful systems of "picking up" a skilled trade. Remedies for these evils are proposed, e.g., to dovetail "blind alley" trades with trades where training begins late.

The Quarterly Journal of Economics (Boston).

FEBRUARY, 1910. *Proposals for Strengthening the National Banking System.* I. O. M. SPRAGUE. Some not revolutionary changes of law would enable the banks to serve the community better in normal times, and to meet emergencies. *The Struggle over the Lloyd-George Budget.* E. PORRITT. *The Single Tax in the English Budget.* H. J. DAVENPORT. Rents, not the capitalised value of rents, should form the basis of such a tax. No serious results are expected from the English proposals. *Yeoman Farming in Oxfordshire.* H. L. GRAY. The views of Hasbach, Mantoux, Toynbee, and others as to the decline of yeoman farms in Oxfordshire are mistaken. Mr. Johnson alone rightly concludes that the decline occurred mainly between the sixteenth century and 1760.

Political Science Quarterly (New York).

MARCH, 1910. *The Payne-Aldrich Tariff.* G. M. FISH. *Monetary Experiences in the Argentine.* I. GRINFIELD. *The British Budget and Social Reform.* G. PAISH.

American Academy of Political Science (Philadelphia).

MARCH, 1910. This number deals with *Public Recreation Facilities*. A supplement embodies the proceedings of the sixth annual meeting of the *National Child Labour Committee*.

Journal des Économistes (Paris).

MARCH, 1910. *Guerre de Tarifs.* G. DE MOLINARI. *Conceptions . . . du Socialisme.* Y. GUYOT. *Le tarif Américain et la France.* D. B. MASON.

APRIL. *Les arguments protectionnistes en France et aux États-Unis.* YVES GUYOT. *Les clauses sur le valeur du sol, sont-elles économiquement justifiables?* L. L. PRICE. Definitely not. Adam Smith's canons of economy and certainty are violated. *Les Industries françaises—la Brasserie.* G. PATUREL. *La question des retraites ouvrières en France.* M. BELLOM.

- MAY. *La politique contre les vérités économiques.* Y. GUYOT.
Theorie sur la commerce au XVIII Siecle. E. LEVASSEUR.
Le langage économique. W. W. CARLILE.

Revue d'Économie Politique (Paris).

- MARCH, 1910. *Histoire des monnaies et du commerce d'argent en France.* E. LEVASSEUR. *La machinisme et le chômage.* G. OLPHE-GALLIARD.

- APRIL. *Histoire des monnaies . . . (suite et fin).* E. LEVASSEUR.
La réalité des surproductions générales. A. AFTALION. J. B. SAY et les origines. A. ALIX. *Une théorie négligée.* A. LÄNDY.

Revue Économique Internationale (Brussels).

- APRIL, 1910. This number is devoted to the various economic problems connected with Water.

Jahrbücher für Nationalökonomie (Jena).

- FEBRUARY, 1910. *Die Landwirtschaftsrente.* K. SCHÖNHEYDER.
Die inneren Wanderungen. H. WOLFF. *Zur Verteidigung des Gesetzes der kleinen Zahlen.* L. v. BORTKIEWICZ.

- MARCH. *Die Löhne im staatlichen Steinkohlenbergbau.* HERBIG.

- APRIL. *Die Finanznot des Staates und Mittel zu ihrer Hebung.* F. GEHRKE.

Archiv für Sozialwissenschaft (Tübingen).

- MARCH, 1910. *The Law of Decreasing Returns in Agriculture* is discussed in a first article by JOSEPH ESSLEN. Under the head of Social-democratic Priests, K. VORLÄNDER gives an account of some clergymen in Germany and other countries answering to this description.

Giornale degli Economisti (Rome).

- JANUARY, 1910. *L'opera Scientifica di L. Walras.* V. PARETO. *Le forme moderne dell' impresa industriale.* G. ARIAS. *Sulle municipalizzazioni.* A. CABIATI. *L'applicazione della matematica all' economia.* L. AMOROSO.

- FEBRUARY. *Ragioni dei poteri del Direttore Generale delle Ferrovie.* IL FERROVIÈRE. *Il disegno di legge sugli Zuccheri.* E. GIRETTI.
Il prezzo come strumento di lotta fra organismi. E. SELLA.

La Riforma Sociale (Turin).

- JANUARY-FEBRUARY, 1910. *Alle frontiere della Scienza economica.* P. JANNAONE. A study in economic methods and conceptions.

NEW BOOKS.

BURN (J.). *Stock Exchange Investments in Theory and Practice*, with chapters on the Constitution and Operation of the Bank of England and the National and Local Debts of the United Kingdom. London: Layton. 1909. 10s. 6d.

CHAPMAN (S. J.) and HALLSWORTH (H. M.). Manchester: University Press. 1909. Pp. 164. 2s.

CULLEN (A.). *Adventures in Socialism: new Lanark Establishment and Orbiston Community.* London: Black. 1910. Pp. 346. 7s. 6d.

DAVIS (J. F.). *Bank Organisation, Management, and Accounts.* London: Pitman. 1910. Pp. 157.

[By the Lecturer on Banking and Finance in the City of London College.]

DAWSON (W. H.). *The Vagrancy Problem.* London: P. S. King. 1910. Pp. 270.

GHOSH (H. H.). *The Advancement of Industry.* Calcutta: Cambay. 1910. Pp. 222.

HARDY (F.). *The Theory of the Construction of Tables of Mortality, and of similar Statistical Tables in use by the Actuary.* London: Institute of Actuaries. 1909. 7s. 6d.

JEVONS (H. STANLEY). *The Sun's Heat and Trade Activity.* London: King. 1910. Pp. 35.

[Extracted from the *Contemporary Review* for August, 1909, with the addition of a preface and summary.]

JOHNSON (A. S.). *Introduction to Economics.* London: Heath. 1910. Pp. 404.

[By the Professors of Political Economy in the University of Texas.]

LOCH (C. S.). *Charity and Social Life.* London: Macmillan. 1910. Pp. 496.

MAW (P. T.). *The Practice of Forestry. Concerning also the Practice of Afforestation.* London: Unwin. 1909. Pp. 254. 17s. 6d.

PRATT (E. A.). *Canals and Traders.* London: King. 1910. Pp. 123.

[The plan of resuscitating canal traffic by State aid is combated, the argument being illustrated by maps and photographs.]

ROWNTREE (B. S.). *Land and Labour (Lessons from Belgium).* London: Macmillan. 1910. Pp. 633.

SCHRIJVERS (J.). *Handbook of Practical Economics. Translated from the French by F. M. Capes.* London: Sands. 1910. Pp. 312. 5s.

[Father Schrijvers represents the Roman Catholic School of Political Economy.]

SMITH (JAS. C.). *The National Providence Essays.* London: Kegan Paul. 1910. Pp. 103.

STRACHAN (W.). *Cost Accounts: the Key to Economy in Manufacture.* Third edition, with additional forms and specimen workings. London: Stevens. 1909. 4s. net.

TODD (JOHN A.). *Political Economy. A handbook of Economics and Public Finance for Egyptian Students.* Edinburgh: Hodge. 1910. Pp. 422.

[The author is a lecturer in the Khedival School of Law, Cairo. He draws illustrations from his environment; and devotes separate chapters to the Currency of Egypt, Taxation in Egypt, and the Egyptian State Debt.]

BROOKS (J. G.). *The Conflict between Private Monopoly and Good Citizenship.* Boston: Houghton. 1909. Pp. 43. \$1.50 net.

BRITTON (W.). *White Slavery. A plea for the largest possible measure of individual freedom consistent with the freedom of all.* New York: Werner. 1909. Pp. 336. \$1.50.

[A criticism of the present trades union system.]

BRYCE (J.). *The Hindrances to Good Citizenship*. New Haven, Conn.: Yale University Press. 1909. Pp. 138. \$1.15 net.

DELAND (L. F.). *Imagination in Business*. New edition, revised and enlarged. New York: Harper. 1909. Pp. 108. \$.50 net.

HAWLEY (F. B.). *Enterprise and the Productive Process*. New York and London: Putnam's Sons. Pp. 467.

NIJHOFF (M. P.). *The Scottish Staple in the Netherlands*. The Hague: Nijhoff. 1910. Pp. 237 + cccxvi.

PHILLIPS (J. B.). *Freight Rates and Manufactures in Colorado. A Chapter in Economic History*. Boulder, Colorado: University of Colorado. 1909. Pp. 62. \$.75.

[A discussion of the manner in which Denver has been discriminated against as a manufacturing centre, by the railways.]

PUTNEY (A. H.). *Corporations: Organisation, Financing, Management*. Minneapolis: Cree Publishing Co. 1909. Pp. 408. \$4.80.

VEILLER (LAWRENCE). *Housing Reform. A Handbook for Practical Use in American Cities*. (Russell Sage Foundation.) New York: Charities Publication Committee. 1910. Pp. 213.

[The book is brought out in the hope of encouraging legislation against overcrowding, which is said to prevail throughout the Union, in the hamlets of Indiana, as well as New York and Chicago.]

VINOGRADOFF (P.). Editor. *Oxford Studies in Social and Legal History*. Vol. I. *English Monasteries on the Eve of the Dissolution*. By Alexander Savine. *Patronage in the Later Empire*. By F. De Zulueta. New York: Oxford University Press. 1910. Pp. viii + 380. \$4.15.

ANSIAUX (PROF. MAURICE). *Principe de la Politique régulatrice des Changes*. Bruxelles: Misch et Thron. 1910. Pp. 259.

GAUTIER (LOUIS). *L'État Financier*. Paris: Giard. 1910. Pp. 112.

KAUTSKY, KARL. *Le Chemin du Pouvoir*. Traduit de l'Allemand par A. P. Paris: Giard and Brière. 1910.

LEENER (G. DE). *L'Organisation Syndicate des Chefs d'Industrie*. (Etude sur les Syndicats Industriels en Belgique.) (Instituts Solway.) Brussels: Misch. 1909. 2 vols.

RAFFALOVICH (A.). *Le Marché Financier, 1908-1909*. Paris: Alcan. 1909. 12 fr.

DUNKER (DR. RUDOLF). *Wirtschaftstudien aus Südamerika Speziell über Chile*. Leipzig: Duncker und Humblot. 1910. Pp. 202.

EHRENBERG (DR. R.). *Terrorismus in der Wirtschaft Wissenschaft*. Berlin: Hobbing. 1910. Pp. 132.

FAJANS (W.). *Die russische Goldwährung*. No. 141 of "Staats- u. sozialwissenschaftliche Forschungen," edited by Schmoller and Sering. Leipzig: Duncker. 1909. Pp. xv + 183. 4.50 m.

KELLER (K.). Die Besteuerung der Gebäude u. Baustellen, insbesondere die Wertzuwachssteuer. Second edition, enlarged. Berlin: Puttkammer. 1910. Pp. 324. 4 m.

LIEFMANN (PROF. DR. R.). Kartelle und Trusts. Zweite, stark erweiterte Auflage. Stuttgart: Moritz. Pp. 210.

LUX (DR. KÄTHE). Studien über die Entwicklung der Warenhäuser in Deutschland. Jena: Fischer. 1910. Pp. 208.

RIESSER (DR.). Die deutschen Grossbanken und ihre Konzentration im Zusammenhange mit der Entwicklung des Gesamtwirtschafts in Deutschland. Jena: Fischer. 1910. Pp. 715.

SCHIFF (EMIL). Unternehmertum oder Gemeinbetriebe. Leipzig: Duncker und Humblot. Pp. 80.

SCHMIDT (GEORG). Der Einfluss der Bank- und Geldverfassung auf die Diskontopolitik. Leipzig: Duncker und Humblot. 1910. Pp. 120.

SIMON (II.). Die Schulspeisung. (No. 89 of the "Schriften des deutschen Vereins f. Armenpflege u. Wohltätigkeit.") Leipzig: Duncker. 1909. Pp. viii + 93. 1.60 m.

WARSCHAUER (O.). Zur Entwicklungsgeschichte des Sozialismus. Berlin: Franz Vahlen. 1909. Pp. xiv + 403. 5 m.

[The author is Professor of Political Science at Berlin.]

MAGRI (F.). Nuova teoria socio-economica delle costituzione politica. Pisa: Vannucchi. 1910.

MICHELIS (R.). Storia del Marxismo in Italia. Roma: Mongini. 1910.

NICEFORO (A.). Antropologia delle classi povere. Milano: Valardi. 1910.

RICCI (UMBERTO). Il Capitale. (Biblioteca di Scienze Sociali, vol. lviii.) Turin: Bocca. 1910. Pp. 264.

TENERELLI (F. C.). Le finanze comunali di Catania verso il secolo xvi. Catania. 1910.

THE ECONOMIC JOURNAL

SEPTEMBER, 1910

GERMAN LABOUR EXCHANGES.

PROBABLY few people in England have any conception of the amount of literature which has appeared in Germany on the subject of labour exchanges. In quantity, at least, it far outweighs all that has been written in England during the last twenty years on the whole problem of low wages and unemployment. Few people in England, further, are aware that the first labour exchange in Germany was started in the year 1841, and that there are now in Germany, at the lowest calculation, over one thousand labour exchanges. So far in England only two accounts of any note have appeared on this subject. The first was a report presented to the Board of Trade in 1904 on "Agencies and Methods for Dealing with the Unemployed in Certain Foreign Countries," by Mr. D. F. Schloss. The other consisted of two extremely interesting descriptions of German labour exchanges by Mr. W. H. Beveridge, published in two earlier numbers of this JOURNAL.¹ Out of the mass of material collected by the present writer for a descriptive work on the many-sided aspects of German labour exchanges, a few points have here been selected in advance in order to deal somewhat cursorily with one or two aspects which may be of immediate interest as showing how Germany has met and dealt with problems which the new labour exchanges in England are already called upon to face.

In this country popular attention has been directed mainly to the public official labour exchanges in Germany, and streams of English visitors have poured over to inspect the big labour exchanges in some of the large towns. The following figures will show that there are three most important kinds of labour ex-

¹ See Appendix to Unemployment, by W. H. Beveridge.

changes, namely, the public exchanges, those of the masters, and those of the men; and we give here the figures of the places filled by each in the whole of the German Empire in 1908 :—

Public Labour Exchanges (figures for men only)	660,000
Employers' Labour Exchanges (almost entirely men)	560,000
Employees' Labour Exchanges (almost entirely men)	300,000 ¹

Still more surprising is a comparison of the figures of places filled by Munich in the years 1906 and 1908 by the different kinds of public and private labour exchanges. It may be of interest to note that the Munich Public Labour Exchange was selected by Mr. Beveridge as the most successful and best-equipped labour exchange in Germany, and yet it will be noticed that the proportion of places filled by the public exchange was smaller in 1909 than in 1906 :—

<i>Places filled.</i>	1906.		1909.	
		Per cent.		Per cent.
(1) By Public Labour Exchanges	53,673	55	64,516	51·3
(2) Philanthropic Unions	10,329	10·6	10,481	8·5
(3) Joint Exchanges of Masters and Men in Certain Trades	7,987	8·2	4,751	3·8
(4) Employers' Exchanges	356	0·3	17,942	14·3
(5) Employees' Exchanges	8,460	8·6	13,450	10·7
(6) Profit-making Agencies	16,842	17·3	14,293	11·4

In the *Contemporary Review* for October, 1909, there appeared a highly picturesque article on the Berlin Labour Exchange, signed "Eulenspiegel," which contained these words :—"In connection with the admirable system of insurance in Berlin, an institution is being carried on whereby the evils and sufferings resulting from unemployment are reduced to what is, after all the multiplex circumstances of the case have been duly weighed, a humanly rational minimum." This institution turns out to be the Berlin Central Labour Exchange. It is well to remember, however, that this institution, at the highest estimate, does not fill one-third of the total places filled by labour exchanges in Berlin, and that, in spite of the efforts of all the labour exchanges in Berlin, at least two-thirds of the workmen still get work by turning up at the factory gates, by answering advertisements, or through the help of the profit-making agencies.

As far as labour exchanges are concerned, the most striking feature in Germany during recent years has been the phenomenal growth of the Employers' Labour Exchanges. Between the years 1904 and 1908 the number of places filled by them has

¹ The accuracy of all these figures has been hotly disputed by the rival parties. The writer is satisfied, however, that they furnish a rough idea as to the proportion of places filled by the rival exchanges. Under the Employers' Labour Exchanges have been included the exchanges of the *Innungen* or guilds.

probably doubled, and there has been an even more phenomenal increase in 1909 and the first part of 1910. 'The first Employers' Labour Exchange was started in Hamburg as early as 1889 in the iron and steel industry. From thence, some years later, it spread to the shipping and docking industry, notably in Hamburg, where the Employers' Labour Exchanges have now almost complete control of the market. But the year 1909 formed the critical year in the history of Employers' Exchanges. The General Federation of Employers in the building industry decided to start labour exchanges, and made an effort to insert in the new agreement with the men a clause which ran:—"The labour exchanges established or to be established by the employers are to be recognised and used to the exclusion of all other methods, by employer and employed alike. The management of the labour exchange is to follow lines laid down by the employers, and the whole cost of it is to be met by the employers." This agreement between masters and men was to come into force in April, 1910. The demand by the masters for a compulsory use of the exchange was one of the chief causes which led to the huge lockout of 200,000 men in the building trade from April to June, 1910. Finally, the matter is left undecided. The employers retain their labour exchanges, though they have not been able to insert the compulsory clause in the agreement. Also, in 1909, the employers in the mining industry decided to start a compulsory labour exchange in the Rhine-Westphalian mining district, and the matter formed the subject of a special discussion in the Reichstag. But, in spite of this, the employers have started their exchanges, though they have not yet been able to enforce a completely compulsory use of them upon the men.

In the present year there has been carried through the Reichstag a new law of the utmost importance and fraught with immense possibilities. It is ostensibly and primarily directed against the private employment agencies which make a livelihood from their work. Recent investigations have shown that these agencies are often contrary to the best interests of the public. Huge fees are charged, and sometimes even bogus technical schools have been started by these agencies to attract people to them. In future, the fees are to be fixed by the magistrates, who have power to close any agencies if they see fit, and to refuse to allow new ones to be started if, in their opinion, the demand is already met by the public labour exchange. No fees may be charged except for places actually found, and no private employment agency may be set up in conjunction with public-

houses, lodging-houses, tobacco shops, pawnshops, or lottery agencies. The discussion in the Reichstag was of great importance as showing the attitude of the public. An amendment was proposed by the Socialist party to make labour exchanges a State monopoly. This was rejected by the Reichstag; but the Secretary of State, Herr Delbrück, made no concealment of the fact that, in his opinion, the ideal was the public impartial labour exchange. So great was the influence of upholders of public exchanges that, in spite of strenuous opposition from the employers, a special clause was inserted which allowed local authorities to extend most of these regulations, not only to the profit-making agencies, but to the others as well, with the power of closing those which were clearly against the interests of the public. It was clear from the discussion that a way was thus opened for the more democratic Governments in the south, such as Baden and Bavaria, to proceed by law against the Employers' Labour Exchange. As a writer in *Soziale Praxis* says:—"There is no doubt that this weapon, even if it be not used for years, yet hangs like the sword of Damocles over the head of the huge and unscrupulous labour exchanges of the employers."

It is of great importance to England to discover what are the causes of the growth of the Employers' Labour Exchanges. There is no doubt that federation among the German employers is more highly developed than among the English. The amazing growth of the Kartell System is a proof of this, and the more theoretic training of the German employer has shown him what a powerful weapon the Employers' Exchange can be. For instance, if a strike breaks out in a firm, the Employers' Exchange can insist on the workmen who come to the exchange going to this firm; and if they refuse to be blacklegs, the exchange can shut them out from all other work. Further, it enables them to keep a complete black-list of all dangerous characters, or, to quote one of their phrases, "Socialists and other agitators."

This side of it is easily explicable, and gives food for reflection as to how far it may not be advisable in England for State action to be taken to guard against the danger of labour agencies being used as a weapon by either masters or men.

But it would be unfair to the employers to say that their labour exchanges have been started merely as weapons against the workmen. Conversation with a large number of employers has convinced the present writer that there exists a great deal of dissatisfaction on the part of employers with what they call the unbusinesslike methods on which the public labour exchanges are

conducted. When one visits, for instance, the Employers' Labour Exchange in Berlin for the metal industry, and then the Public Labour Exchange, one is impressed with the immense superiority of the Employers' Labour Exchange from the purely business point of view. The manager of the Employers' Exchange for the metal industry has not only studied statistics and political economy at the university, but is also thoroughly conversant with all branches of the metal industry. Under him he has sixteen assistants, more than the entire staff of the Public Exchange for all the many industries with which it has to deal,¹ and these assistants, having also a thorough knowledge of every branch of the metal industry, can consequently respond to the wishes of the employers far better than the officials of the Public labour exchange. Then, again, in the Public Exchange in Berlin, only men on the spot in the waiting-room are engaged. In the Employers' Exchange hundreds of postcards are sent out to the men every week advising them about work.

The chief objection of the employers centres round the question of selecting workmen. In the employers' newspapers and magazines one finds it asserted again and again that the Public Labour Exchanges send out the men according to the order in which they have registered themselves. In the official organs of the Public labour exchange this charge is perpetually and indignantly refuted. Truth, as is often the case, lies in the mean between the two.

In England, except among those actually responsible for the working of the labour exchanges, comparatively little interest has been aroused over what is in Germany a burning question, namely, by what method the manager of the labour exchange is to allot the work amongst the applicants. In England at present there are no regulations laid down. Everything rests with the manager. Thus, to take an extreme instance, in a dock town, if a manager could persuade both employers and employed to use his exchange, he could set to work to decasualise dock labour without any Act of Parliament. For if he has a thousand applicants a week for five hundred casual jobs, he could give all the jobs to one-half the men and none to the other half.

In Germany, on the other hand, after years of experience, a tradition has gradually been built up. The director of the labour exchange has had to steer between two rival claims, those of the employer and those of the employed.

¹ The Westphalian Union of Mining Employers has estimated in its budget for an expenditure of no less than £15,000 for the Labour Exchanges in this coal district,

The employer's demand is easy and plain. He requires that the manager of the exchange shall pick out three or four of the most suitable men and send them to his factory, leaving him to select from amongst them those who suit him best. But this is not so easy as it seems. In the first place, in Germany as in England, a great number of managers have very little practical experience of business life, and it is extremely hard by looking at a fitter or a turner to say whether he is a capable workman or not. And especially in the case of the more unskilled industries, there may be in big towns a hundred or more men equally suitable for the post, and in this case some method of selection must be adopted.

What the workmen demand we can see best by reference to two most remarkable labour exchanges, the so-called impartial exchanges of the brewing industry and the printing industry. Both these are regulated by a joint committee of masters and men. In both, but especially in the printing industry, the men are extremely well organised. The printers claim that 98 per cent. of the men are in their union. Every trade unionist is pledged to accept work only through this impartial labour exchange. The employer is not so pledged; but as all the printers belong to the union, he is practically compelled to take his men through the labour exchange. The men have insisted that the manager of the exchange shall be compelled to register them all in the order in which they apply for work, and send them out in turn, except when he is convinced that they are not suitable for the particular job. And wherever the workmen have the upper hand, their labour exchange always keeps as far as possible to the order in which the men have registered themselves.

And their claim is not lightly to be dismissed. In the printing trade, for instance, the masters often ask for youths because they are cheaper, but the manager of the labour exchange strictly follows the list, and sends out, it may be, some older men and some younger. The adherence to the list has a great advantage for the older men, who find themselves thus on an equality with the younger. And as the younger realise that some time they, too, will grow old, they are also ready to give up present for future advantages. It also has the tendency of distributing the pressure of unemployment rather more equally over the workmen. Simply by the lottery of fortune in England one capable workman may be a long time out of work, while another may have the good luck to get a post each time he applies. By the method of

following the list all have an equal chance. But, it may be urged, what about the employers—will they not get inferior men? In reply, the trade unionist answers that an employer is not obliged to engage a man if he be unsuitable; and even if he does engage him, he can dismiss him after a few days. It is quite possible that an inferior workman may get sent around to all the employers and get rejected by them all, unless some employer, pressed for men, gives in and takes him. Thus the trade unions claim that it need not mean that the employer gets inferior workmen, but it does mean that the work is more evenly allotted, and that older and younger men have a fairer share of employment. In some cases, too, this much latitude is allowed to the employer: that one out of every four or five of their employees may be engaged other than through the exchange.

What, then, is the attitude of the public labour exchanges between these conflicting claims?

The German managers confess that many mistakes were made in the past which did much to alienate the employers from the exchange. In many cases labour exchanges were regarded more as a means of finding work for the workless than as a means for finding the most suitable men for the most suitable posts. As long ago as 1902 the great authority on German exchanges wrote:—"The better the labour exchanges are organised, the less will they be used by men actually out of work, and the more will they be used by men who are likely to fall out of work or who desire a better post." But, in spite of these wise words, the Berlin Labour Exchange still makes it a rule to deter men who are still in work from making use of the exchange. Past traditions die hard, and many employers still regard the labour exchanges as a device for finding work for inefficient "out-of-works."

But as the years have gone on there has gradually grown up among the public labour exchanges a more or less uniform method of dealing with the problem of allotting work. A circular on this point was recently addressed to all these exchanges, and from the answers it was plain that an overwhelming majority were in agreement at least upon the theoretic answer to this problem.

When the employer demands men the labour exchange must, before all things, have an eye to the efficiency of the men. As we have before said, it is extremely hard for managers without actual experience as foremen in an industry to select the right people, but they make the attempt, in which they are helped by

the insurance card, which gives evidence whether the man has been regularly employed or not. Next, the choice should be given to the employer, and, if possible, two or three men should be sent to him.

But what about the workman? In this case a choice should also be given him between employers. In some cases he is given the name of two or three employers, and he is allowed to choose between them; but if he is sent out to two or three, this makes it infinitely harder to get a reliable record of the posts filled; so more frequently he is allowed to refuse any particular post and wait for another, or else no choice at all is given to him.

But, further, there is the problem, especially in the case of unskilled labour, of there being a great many men equally suitable. In Berlin, and in many other towns, all the names are entered into a book or on to cards in the order of application. First, preference is given, if capacity is equal, to those who have been there the longest; and then, after that, preference is given to married over single, and to those with many children over those with few. The more unskilled the work, the greater the prominence given to these considerations, especially in a labour exchange like Berlin, where there often sit over one thousand unskilled men in the large hall, of whom the majority are prepared to undertake various kinds of digging and navvying work.

In this way the public labour exchanges try to hold the balance between the two as far as the problem of allotting work is concerned. But there are wider issues involved with which we must briefly deal. All the managers whom we have questioned reply without any hesitation that, so long as they can satisfy the employers, their aim is to give out work according to need. The older and married men need it more; therefore they should have it. In England, on the other hand, it is noticeable that on the application form the question as to marriage is not even asked. The Germans claim that in the interests of the nation it is just and right that those who have the burden of the family should be favoured as far as possible.

It will be obvious to all that one cannot judge of the success of a labour exchange solely by considering the number of places which it fills each year. A great deal depends upon whether the posts are permanent or merely temporary. The Berlin Central Labour Exchange publishes some interesting figures upon this point. In 1908 it filled 57,655 places for men, but the actual number of men who got work was only 25,555. One workman got work no less than sixty times in the year through the labour

exchange, while fifty-nine got work between twenty and thirty times during the year, in some cases only for a few hours. This raises an interesting point. In theory it may be said that the more difficult it is for an employer to get men at a moment's notice, the more likely he will be to employ men regularly, whilst if he can ring up a central labour exchange and get them at a moment's notice, the more inclined he will be to dismiss them the moment a job is finished, and ring up the exchange for fresh labour when a new job begins.

Many of the leaders of the trade unions assured the writer that the system of employing men for short periods sometimes a few hours, was on the increase. And even some of the managers of the labour exchanges admitted that the exchange was helping on this tendency. But it was impossible to get much statistical evidence upon this point even from the Imperial Statistical Office. One very interesting piece of evidence, however, as to the growth of employment for short periods can be got from the figures of the labour exchange in the Berlin brewing industry, managed by a joint committee of masters and men. A careful record has been kept of the number of permanent posts filled, and the number of the posts where the employer expressly declared that he only wanted men for a short period. Out of every hundred posts filled since 1900 the proportion was as follows :—

			<i>Permanent Posts.</i>	<i>Temporary Posts.</i>
1900	...	...	58	42
1901	...	...	47	53
1902	...	...	39	61
1903	...	...	37	63
1904	...	...	36	64
1905	...	...	34	66
1906	...	...	35	65
1907	...	...	31	69
1908	...	...	23	77
1909	...	...	22	78

From a system of employment for short periods to a system of casual labour is not a far step. It is obvious that, if by some mischance there are too many men in any particular industry at a given moment, the shorter the period of employment, the more chance have all of them to secure at least some share of the work. All the managers of the German labour exchanges whom we questioned declared that their aim was, so long as they could satisfy the employer, to distribute the work as far as possible amongst all the applicants. It may be that in Germany industry is too new for the problem of under-employment to have become acute. Many trade unionists declare that it is already acute, but

in the absence of statistical evidence we must leave the question open. One thing, however, is clear. Given too many men in any industry, and given a labour exchange doling out casual work in turn to all of them, instead of draining the surplus pool of labour, the labour exchange might even have the effect of increasing the size of the pool. The problem is one which requires careful attention, and seems to emphasise the fact that twenty years of experience in Germany has not yet hit upon the right method to be adopted in the allotment of work among the applicants who crowd the labour exchanges.

J. ST. G. HEATH

THE MOVEMENT FOR INTERNATIONAL LABOUR LEGISLATION.¹

THE international side of the Labour movement can be traced back to 1836, when some German exiles in Paris formed a secret society, on a communistic basis, under the name of the "League of the Just." Three years later it became involved in a rising in Paris, and so came to London, where it met workmen of other countries, became avowedly international in character, and had impressed upon it Marx's doctrine of the necessary unity and solidarity of the Proletariat movement all over the world. In 1847 a Congress was held in London under the auspices of Marx. The Association was christened the "Communist League," and the following year was famous for the publication of the "Communist Manifesto" of Marx and Engels. This marked the climax of the first "International Association of Working Men." The year of European revolutions was succeeded by a reaction and a period of industrial prosperity. This combination of events put an end, for the time, to any chance of the success of revolutionary methods. 1852 saw the end of the Association.

The subject of international labour legislation was not entirely dropped. During the next few years it was brought forward prominently by an Alsatian manufacturer, Le Grand, and in 1856 there was an International Conference on Poor Relief, to which most of the European Governments sent representatives.

In 1862-63 French workmen sent deputations to London, in the first year to visit the Exhibition, and this move had the support, both moral and pecuniary, of the Emperor; but no definite step was taken until 1864, when a large meeting of working-men

¹ An attempt has been made in the following article to give some analysis of the motives underlying the movement for International Labour Legislation. A recent article by Professor Francke (June, 1909) covered some of the historical ground, so to avoid over-lapping, no more than a passing reference has been made to the Berlin Conference of 1890, and to the rise and development of the International Association for Labour Legislation, both of which were fully dealt with by him. It seemed, however, necessary to give a short sketch of the history of the movement before proceeding to analyse it.

of all nations was held in St. Martin's Hall, at which Marx was present. This was the inception of the movement properly called "The International," and it was at this meeting, attended by fifty representatives of foreign countries including twenty-five from England, that the constitution of the Society was drawn up. A General Council was appointed to sit in London. The president, treasurer, and general secretary were all Englishmen, namely, Odger, Wheeler, and Cremer. The working-men of each nation were recommended to unite in national bodies, and these were to be represented on the General Council by a corresponding secretary. The Council was to summon annual congresses, and to exercise an effective control over the affairs of the Association, but local societies were to have free play in all local questions.

The first Congress of the "International" was held at Geneva in 1866, then at Lausanne in 1867, at Brussels in 1868, and at Bâle in 1869. The documents relating to these congresses have mostly been lost in America, but according to the report of the Congress at Bâle, the countries represented were England, France, America, Belgium, Germany, Austria, Switzerland, Italy, and Spain. The Trade Union leader, Applegarth, was one of the English delegates. It was at this Congress that Bakunin was a delegate from Lyons, and that he and his associates were at variance with Marx.

For the next two years the proceedings of the "International" were interrupted by the Franco-German War and the events that followed it. The Congress had arranged to meet in Paris in 1870, but the war rendered this impossible, and the following year saw the strange and transitory phenomenon of the Commune. The precise relation between it and the "International" has never been exactly explained. It seems clear that some French members took part in it on their own responsibility, that Marx commended it after its fall, and that there was doubtless a strong element of Socialism in the abortive attempt, although it was primarily political in aim.

In 1872 there was a Conference at The Hague. This was the occasion of the rupture between the Anarchists and the Marxists, which ended finally in the defeat of Bakunin and the expulsion of his followers. But the triumph of the Marxists proved to be merely nominal. The seat of the General Council was removed from London to New York, and this proved the beginning of the end. The sixth Congress was held at Geneva in 1875, and then the "International" gradually expired.

From the death of the "International" until the present day,

the history of this movement is the history of the various congresses, Trade Union, Socialist, official, and unclassified. It is difficult to trace any conscious effort at continuity through them; often two International Congresses are held in the same year, without any relation to one another, and, although an attempt has been made in this paper to note the chief congresses of each year, it must not be supposed that the list is by any means exhaustive. To give one instance alone, nearly every large Trade Union has now an annual International Congress, and the last few years also have seen the rise of the international side of such questions as Women's Suffrage, Anti-Vivisection, Free Trade, Peace, &c.

Between 1871 and 1876, various suggestions were made by Germany and Switzerland with regard to international action on labour matters, and in 1881 the Swiss National Council decided to call the Council together for an International Labour Congress, but, as the Manchester School was then exercising a predominant influence, nothing was done. In 1883 there was an International Congress at Paris, in which English Trade Unionists were persuaded to take part, and in the same year the Swiss workmen at Zurich decided to combine with the Working-Men's Association in Germany and France, and to agitate for international legislation. In 1886, in the French Parliament and in the German Diet, the working-men's representatives asked their respective Governments to take the initiative in this matter. The English Trade Union Congress was in favour of the movement, and in Switzerland its pioneers, Scherrer and Decurtins, agreed upon a programme of social reform. In the same year the Grutli resolutions were passed recognising the necessity for international legislation to ameliorate the social condition of the working classes, by raising the age of child labour, limiting the working day, and prohibiting industrial poisons. The same year saw an International Trade Union Congress at Paris, at which the chief measures that were urged to be passed by international convention were those relating to child labour, suppression of night work except under special circumstances, and an eight-hour day.

1888 is important as being the year in which the first International Trade Union Congress was held in London, and in the following year the greatest of all the Socialist congresses was held in Paris. This was chiefly remarkable for the dispute between the two parties, the uncompromising Marxists who would have nothing to do with political action, and those Socialists who were ready to co-operate with the Democratic Party.

In 1890 the first official Congress in connection with this

subject was called by the German Emperor, and seven years later the "International Association for Labour Legislation" was started at Zurich.

It is extremely difficult to arrive at a definite understanding of the principles underlying International Labour legislation. That they are many and varied is not, perhaps, to be wondered at, but that they should be contradictory—both explicitly and implicitly—is surely unnecessary, and points to considerable confusion in the minds of those who have forwarded the movement in one way or another. But amidst all this confusion, much of which still exists, it cannot be denied that, in the last twenty years, a great change has been brought about in the conception of Labour legislation, both national and international. When, in 1890, Lord Salisbury replied to Bismarck's letter inviting England to the Berlin Conference, he said: "If the words 'agreements in regard to a limit for the length of the working day' imply a policy of direct legislative restriction upon the liberty of adult male workmen to work as long as they please, it is right to say that the principles of legislation accepted in this country would preclude Her Majesty's Government from making such a proposal to Parliament. If, however, they only suggest provisions for facilitating the conclusion of free agreements upon this matter between employers and employed, Her Majesty's Government have no exception to take to its inclusion among the subjects."

The German Ambassador in London reassured Lord Salisbury by telling him that the investigation was to be concerned with the lot of operatives and miners, and that these questions, being outside the range of politics, were well adapted for examination by experts, a remark which has its signification as illustrating the restricted conception of the sphere of politics surviving at that date.

We can make a first approximation to an analysis of the principles of the international movement by distinguishing two views :

- (1) The humanitarian view of the Brotherhood of Man and the solidarity of the Labour movement ; and

- (2) The view of exclusive nationalism, that finds expression in the law of self-preservation and in the alleged necessity for nations to hedge themselves round by means of Protective tariffs, so that their more advanced Labour legislation will not make them fall a prey to their commercial rivals.

(1) *The Brotherhood of Man.*

It is clear from the history of the movement that International Labour legislation is not confined to any particular party within each State, but much of the impetus has undoubtedly been given by the ideal of the Brotherhood of Man, which is supposed by many to be a necessary characteristic of Socialism.

Especially is this the case with the original international movement (1862-73), which seems to have been inspired by this idea, and by the intellectual recognition of Marx's doctrine that the "Proletariat has no country." In 1868 a threatened war between England and the United States was opposed by the Trade Union Congress on the ground that "Our cause is the same. It is a war between the poor and the rich. Everywhere Labour is in an inferior position; everywhere Capital is the same tyrant." War was declared instead against the aristocracy of finance.

At the Socialist Trade Union Congress in London in 1896, when the important international questions at issue were almost lost sight of in the quarrel between the Anarchists and the Marxists, one delegate repudiated the idea that they were there for the purpose of representing nationalities, and asserted that they were met to affirm the Brotherhood of Man. The disorderly proceedings may have seemed a strange method of proof, and under the circumstances it was perhaps necessary to emphasise the point. This is the creed that one would expect of an international movement, but it is not the only view held by the promoters of internationalism, as will be apparent from a consideration of the second point.

(2) *Nationalism—Law of Self-preservation.*

At the Congress of the "International" in 1869, the possible antagonism between nationalism and internationalism was faced. It was urged that, not only must the war between Capital and Labour be essentially international, but that there must be an international federation of national societies, as the only effectual safeguard against the importation of black-leg labour. From a Trade Union point of view this is a very real danger, but measures taken to prevent it may go further and aim at preventing all lower paid labour from entering the country. The International Trade Union Congress at Paris (1886) protested against the action of certain English capitalists who had started factories in France so as to profit by the lower wages there to compete against the English workmen. It was also asserted that the Belgians are in the same relation to the English as are the Chinese to the Australians, and, since it had been proved possible for capitalists

to take advantage of these differences and to pit the workers of one country against those of another, it was necessary that the workers should themselves organise to prevent this kind of competition. It is urged that it is not as foreigners, but as non-unionists, that it is necessary to take precautions against the workmen of other countries, but, since there are certain nations, such as the Chinese, whose standard of life, and therefore of wages, is much lower than that of Western nations, the question tends to become one of race. Thus the argument amounts to this: Unless some sort of international agreement is made, the lower wage nation will be forced by economic considerations to undersell the higher wage nation.

The point at issue is not whether such protection by means of international agreements is right or wrong, wise or foolish, but merely whether it is consistent with the expressed belief in the Brotherhood of Man. It is one thing to pass resolutions at International Socialist Congresses in favour of the possession by the labourer of the means of production and exchange, and to express world-wide sympathy with any attempt in this direction, and quite another thing to welcome foreign workmen who may be the tools used by employers to lower, or to prevent a rise of, the existing standard of life.

It is felt that it is only ignorance of the conditions of work that prevents the foreign workman from sacrificing his self-interest to his enthusiasm for the solidarity of the Labour movement, and this assumption belongs to the most idealistic side of the international movement, but instances are not wanting to prove that it is practical as well. During the strike of the Amalgamated Society of Engineers in 1871, Mr. and Mrs. Sidney Webb say that, "in spite of the active exertions of the 'International,' several hundred foreign workmen were imported, but many of these were subsequently induced to desert.¹ Here the 'International' was of use. At Burnett's instigation, the Danish Secretary in London proceeded to the Continent to check this immigration, his expenses being paid by the A.S.E."² The writers claim this successful resistance of imported black-leg labour as a triumph of internationalism, but when the same theory is applied, permanently and not temporarily, it will be a triumph of pure nationalism.

This aspect of the matter is so closely connected with the foreign competition argument that the two cannot be separately discussed.

¹ *History of Trade Unionism*, p. 301.

² *Ibid.*, p. 301, note.

The foreign competition argument is one of the most important of all those raised in connection with this question. It is more often used by employers than by workmen, and there can be little doubt that it is the necessity, real or imagined, of adequately meeting this objection that has, to a considerable degree, actuated the course of International Labour legislation. The workmen find, when they are brought into communication with workmen of other countries, that "foreign competition" exists on the Continent as well as in England,¹ and the discovery made them sceptical as to the soundness of this objection of the employers to any increase in wages or shortening of hours. Still, we find the President of the Trade Union Congress in England (1886) urging that more missionary work in Unionism should be carried out on the Continent, because it would not only be for the benefit of workers in other countries, but it would remove some of the unfair competition from which British manufacturers suffered.

It is undeniable that the motive of the official congresses—those at Berlin, 1890, and at Berne, 1905–6—was the necessity of meeting the difficulties involved in competition between countries with different standards of Labour legislation. Bismarck, in his letter to Lord Salisbury (1890) inviting England to attend the Conference, says: "The competition of nations in the trade of the world, and the community of interests proceeding therefrom, makes it impossible to create successful institutions for the benefit of working men of our country without curtailing that country's power of competing with other countries. Such institutions can only be established on a basis adopted in common in all countries concerned."

Sixteen years later, Mr. Herbert Samuel, reporting upon the Conference at Berne (1905–6), called by the Swiss Government in conjunction with the "International Association for Labour Legislation," said:

"It is obviously desirable that, when circumstances permit, restrictions on industrial methods intended for the benefit of the workers employed should be adopted in competing countries at the same time and in equal degree. But they (the Government) have intimated their opinion that every effort should be made to secure that agreements entered into with this object should cover all the countries whose competition may be serious."

It has been the fate of every fresh step in social legislation, in England at least, to be met with the objection of the danger from foreign competition. From the first suggestion of Factory Acts

¹ "Report of British Delegates to Workmen on strike at Decazeville."

in 1818 down to the recently passed Trade Boards Bill, this argument has been used as freely and as irrelevantly as has the widows and orphans appeal. Time after time experience has disproved its prophecies. The dismal predictions as to the future of England's manufacturing industry have not been fulfilled. Schulze Gaevernitz, in his exhaustive study of the cotton industry in England, brought forward an array of facts to prove that low wages are dear, that production under sweated conditions is not really economical, and he established the truth of the proposition—so far as this particular industry was concerned—that those nations whose social policy was most advanced, were not thereby handicapped in the competition of the world's markets. Although few would deny this fact, it is felt that the case cannot be so summarily dismissed, and that "while no country ought to be so short-sighted as to hesitate to make regulations which are really vital to the well-being of its people, because its rivals lack the insight to imitate them immediately, a limit is soon reached, and further advances must be conditional to the action of competitors."¹

Thus it would seem that, at the present state of the problem, legislation which must be a burden upon industry, though a legitimate burden, cannot advance beyond a certain limit unless the advance be general. An exact definition of this limit is wanting; perhaps the nearest approach to it is the following:

"Any advantage conferred upon the worker which burdens the employer without increasing the efficiency and the value of the work performed makes it still harder to maintain a position in the markets of the world."² But, as to what advantages do and what do not burden the employer without increasing the efficiency of the work, is left as vague as before.

As opposed to those who are fearful of foreign competition, there is the orthodox Free-Trade School. This argues from the doctrine of comparative costs, that the determining factor in foreign trade is not actual cost of production *between* countries but relative costs *within* those countries.

The question is not whether England can produce manufactured goods more cheaply than can other nations, but whether she can produce them at a less labour cost than she can produce other goods. Legislation which is uniform throughout a country cannot affect relative costs, and thus, it is argued, it does not affect foreign competition. The position is not always stated so baldly, but there is a considerable body of opinion in these matters

¹ *Morning Post*, June 29th, 1909.

² *Morning Post*, Aug. 24th, 1909.

that rests partly upon this theoretic justification of Free Trade, and partly upon the practical argument that no disaster has befallen our industries since the introduction of the Factory Acts. This argument does not tally with the one I have just examined. If the former be accepted, then the international side of the Labour movement becomes even more important than the national side. Social legislation will become mainly dependent upon international conventions, and it will be increasingly difficult to separate those questions which are, and those which are not, affected by foreign competition. If, on the other hand, the orthodox Free Trade theory be applicable to this case, then the whole of the international movement, apart from the emotional aspect of the old "International" and the humanitarian aspect of the modern movement, rests upon a fundamental fallacy as to the nature of foreign trade.

It is seldom, indeed, that the Free Trade argument is pushed to its logical conclusion. The theory is admitted to be sound, but when it is seen that in practice it would involve a considerable amount of dislocation and hardship, a vague appeal is made to international conventions to tide over the difficulty. It is much to be regretted that the practical interpretation of International Labour legislation—the conventions relating to night work for women and the prohibition of white phosphorus in the manufacture of matches—should be of a nature to contribute so little towards the theoretical solution of the problem. The abolition of a practically obsolete exemption in a section of the Factory Acts, was all that was necessary to enable England to be a party to the first Convention, and the Bill for the prohibition of white phosphorus was of a rather special nature, as the substitutes were strictly patented in England. Thus, neither of these cases really touches the question of a general handicapping of a nation by means of improved Labour legislation, and therefore the argument must remain for the present in the region of theory.

The foregoing analysis leads us to the conclusion that the exact relation between International Labour legislation and foreign trade cannot be settled definitely either by theory or by practice. There is no finality about the argument from practical experience, because the cases are never so similar as to allow of an argument by analogy. Neither can the argument from theory hold its ground in the face of practical experience that has so often given a direct proof of the fallacy of its predictions. In so far as there is any conscious theory upon the subject, it is for the

most part vague and to a certain degree contradictory, or, rather, there is no clear distinction drawn between the opposing theories of nationalism and cosmopolitan humanitarianism. The question then arises whether these two are fundamentally separate or whether they can be harmonised with one another, and, if so, along what lines.

It would seem to be as a safeguard that international conventions are necessary. It may be held that the reason why England's industrial advance was not checked, even temporarily, by the Factory Acts, was because the accompanying circumstances were strong enough to have counteracted any backward tendency. Therefore, it may be necessary to provide for a time when the conditions are not so favourable. If, too, there exists a widespread fear, whether or no it can be justified, of the handicapping of native industries by social legislation in advance of that of foreign competitors, it would be a distinct advantage to organise such legislation on international lines.

During the recent Swedish strike, the International Trade Union Congress protested against imported labour to aid the employers, which importation is merely another aspect of the international question. Employers, as well as workmen, federate internationally, and the weapon which they are thus enabled to wield—mutual help during strikes—is what the international federation of workers is formed to destroy. Where, therefore, one international army is opposed to another, equally international, the issue cannot be one of internationalism, and it resolves itself into a phase of the class war—that view of society which cuts right across political boundaries. There are, then, two aspects of this movement: In so far as the question is one of men against masters, it can be better fought on international lines; but, in so far as it is a question of actual wage-earning within a country, then there is a tendency for exclusion on national lines.

To summarise. The movement for International Labour legislation is not confined to one party, though there is a theory, the truth of which we have tried to examine, that Socialism must be international, and, as a matter of fact, Trade Unions have been forced to take up a definite position with regard to strikes, at home and abroad, and the immigration of non-unionists of different nationalities. Measured by legislative results, the most enthusiastic supporter of the movement must admit that it has not been prolific. The White Phosphorus Treaty, the prohibition of night work for women, and the equal-

isation of conditions of workmen's insurance in various countries is the sum total—for the legislation that took place as a result of the Berlin Conference was not exactly of the same kind. No International Convention was signed by the Powers: several resolutions were passed, which were not binding as such, but were supposed to act as a basis for national legislation.

But although up to the present the results are few, it must not be forgotten that it is only since the "International Association for Labour Legislation" has been started, that any conscious and definite line of action has been adopted. Three Conventions signed by practically all the European Powers of importance after nine years' agitation may not prove such a barren result, even if the advance in the future be at the same rate. But there is every reason to think that the advance will be more rapid. Although it was seen that much confusion exists at present as to the basis of international regulation of industry, and although many arguments adduced in its favour are self-contradictory, if not utterly fallacious, still there is a growing popular feeling that after a certain point social advance must be by means of international regulation. Exactly where that point lies, is not, and perhaps cannot be, settled deductively, though it is not too much to hope that greater knowledge and better means of using it may in the future give a firm foundation upon which to build.

D. SHENA POTTER

PRODUCERS' AND CONSUMERS' SURPLUS.

§ 1. I do not propose in this paper to discuss the difficulties which are encountered when consumers' or producers' surplus measured in money is used as an index of consumers' or producers' surplus of satisfaction. Those difficulties have, I conceive, already been fully explored. My problem—logically a prior one—is concerned with the difficulties in the way of determining producers' and consumers' surplus *as measured in money*. This problem was opened up in Mr. Henry Cunynghame's celebrated article on *Some Improvements in Simple Geometrical Methods of Treating Exchange Value, Monopoly, and Rent*; ¹ it is discussed briefly in Prof. Edgeworth's review of Mr. Cunynghame's *Geometrical Political Economy*, ² and at greater length in my article, *Some Remarks on Utility*. ³ The present paper aims at carrying this discussion somewhat further. It is concerned exclusively with long-period phenomena.

§ 2. There is much to be urged against the employment of novel terminology. In the present instance, however, I cannot but think that there is more to be gained than lost by this procedure. Consequently, I shall begin by setting out a series of definitions, some of which involve new phrases.

Let the *supply price* of a given quantity x of any product in any market be defined as that price which is able, and any lesser price than which is not able, to evoke in that market the production of exactly $(x + \Delta x)$ units. ⁴

In like manner let the *demand price* of a given quantity x of any product in any market be defined as that price which is able, and any greater price than which is not able, to evoke in that market the consumption of exactly x units.

¹ ECONOMIC JOURNAL, vol. ii, p. 35, *et seq.*

² *Ibid.*, vol. xv, p. 62, *et seq.*

³ *Ibid.*, vol. xiii, p. 58, *et seq.*

⁴ The cumbrous phrasing of this definition is necessary in order to avoid ambiguity in cases where the supply curve is inclined negatively; for in these cases a price too small to evoke exactly x units may nevertheless suffice to evoke more than x units. The cumbrousness in the definition of demand price is necessitated by an analogous cause.

Let the *private marginal supply price* of a given quantity x of any product in any market be defined as the difference made to the expenses of production (in terms of money) of the person who would produce the extra Δx units of product, by an increase in total production from x to $(x + \Delta x)$ units.

In like manner let the *private marginal demand price* of a given quantity x of any product in any market be defined as the difference made to the ophelimity¹ (in terms of money) of the person who would consume the extra Δx units of product, by an increase in total consumption from x to $(x + \Delta x)$ units.

Let the *collective marginal supply price* of a given quantity x of any product in any market be defined as the difference made to the aggregate expenses (in terms of money) of all the producers, by an increase in total production from x to $(x + \Delta x)$ units.

In like manner let the *collective marginal demand price* of a given quantity x of any product in any market be defined as the difference made to the aggregate ophelimity (in terms of money) of all the consumers, by an increase in total consumption from x to $(x + \Delta x)$ units.²

Let the *average full expenses of production* of a given quantity x of any product in any market be defined as the sum of the collective marginal supply prices of all quantities between o and x , divided by x .

In like manner let the *average full yield of ophelimity* of a given quantity x of any product in any market be defined as the sum of the collective marginal demand prices of all quantities between o and x , divided by x .

§ 3. The various sorts of prices, thus distinguished, as adjusted to various quantities of output, can be represented by curves. The curves relevant to production are (1) a supply curve SS_1 , (2) a curve of private marginal supply prices SS_2 , (3) a curve of collective marginal supply prices SS_3 , (4) a curve of average full expenses of production SS_4 . Those relevant to consumption are (1) a demand curve DD_1 , (2) a curve of private marginal demand prices DD_2 , (3) a curve of collective marginal demand prices DD_3 , (4) a curve of average full yields of ophelimity DD_4 . It is clear that all the four curves relevant to production start at one point on the axis of Y , and, similarly, that all the four curves relevant

¹ The term ophelimity is due to Professor Pareto. It is free from certain ambiguities involved in the common English term utility.

² In a complete discussion it would be necessary to distinguish further between *actual* and *adjudged* private marginal supply and demand prices, because people's estimates of the satisfaction that they will obtain from a purchase or the expenses that they will incur in making a product are sometimes incorrect. In the following pages what is adjudged is assumed to be also actual.

to consumption start at one point on this axis. It is not, however, necessary in regard to either set that coincidence shall be maintained throughout the length of the curves. It is, therefore, desirable to study their relations. All the curves as employed here are, it will be remembered, descriptive of long-period tendencies only.

§ 4. First : consider the relation subsisting between the curve of private marginal supply prices and the curve of collective marginal supply prices.

The private marginal supply price and the collective marginal supply price of any quantity will be equivalent, provided that the difference made by an increase in total production from x to $(x + \Delta x)$ units to the expenses of production of the person who would produce the extra Δx units of product is equal to the difference made to the aggregate expenses of production of all producers. The condition necessary to this result is that an alteration in the output of one supplier does not indirectly alter the expenses associated with a given production of any other supplier. When the whole output is in the hands of a single supplier this condition is always realised. When the output is in the hands of a number of suppliers it is sometimes realised. It would seem, for example, to be realised approximately in some species of agricultural industry. In this case the curves of private marginal supply prices and of collective marginal supply prices will coincide.

The private marginal supply price of any quantity of output will be less than the collective marginal supply price, if an addition to the output of one supplier increases the expenses associated with a given production of any other supplier. This condition is realised, *ceteris paribus*, in an industry worked by more than one supplier, employing a raw material the price of which is raised when its output is increased. In this case the curve of private marginal supply prices, though starting at the same point on the axis of Y as the curve of collective marginal supply prices, lies below that curve through the remainder of its course.

The private marginal supply price of any quantity of output will be greater than the collective marginal supply price if an addition to the output of one supplier diminishes the expenses associated with a given production of any other supplier. This condition is realised, *ceteris paribus*, in an industry worked by more than one supplier, where increased output leads to the *external economies* of improved general organisation—whether production in that industry does, or does not, obey the law of increasing returns as ordinarily understood. In this case the

curve of private marginal supply prices, though starting at the same point on the axis of Y as the curve of collective marginal supply prices, lies above that curve through the remainder of its course.

The relation between the curve of private marginal demand prices and the curve of collective marginal demand prices is exactly analogous to the one I have been describing. The two curves are identical, provided that an alteration in the consumption of one consumer does not indirectly alter the ophelimity associated with a given consumption by any other consumer;—a condition necessarily fulfilled when only a single consumer exists. The curve of private marginal demand prices lies above the curve of collective marginal demand prices if an addition to the consumption of one consumer diminishes the ophelimity associated with a given consumption by other consumers—in cases, for instance, of commodities that are desired partly because they are rare. The curve of private marginal demand prices lies below the curve of collective marginal demand prices if an addition to the consumption of one consumer increases the ophelimity associated with a given consumption by other consumers—in cases, for instance, of commodities that are desired partly because they are common.¹

§ 5. Secondly: consider the relation subsisting between the curve of collective marginal supply prices and the curve of average full expenses of production.

This relation is perfectly precise. Let Q be any point on SS_3 and P the point on SS_4 at which a vertical line through Q cuts SS_4 .

Draw $P R K$ through P , cutting SS_3 in R and the axis of Y in K .

Then, when SS_3 is given, P is determined at such a point that the area $P R Q$ is equal to the area $R K S$.

It is easily seen that, for all values of x in respect of which SS_4 is inclined positively, SS_4 lies below SS_3 : whereas, for all values of x in respect of which SS_4 is inclined negatively, SS_4 lies above SS_3 ; and that, so long as SS_3 remains inclined in one direction, the distance between P and Q increases the further they move towards the right. These propositions are valid alike if the inclination of SS_4 is of the same kind throughout, and if it is first positive and then negative, or *vice versa*.

The relation between the curve of collective marginal demand

¹ The divergences summarily mentioned in the above paragraph are discussed in Mr. Cunyngame's article and in my paper *Some Remarks on Utility*, already cited.

prices and the curve of average full yields of ophelimity is identical with the above. Diagrams drawn on exactly the same plan as that adopted in regard to supply would show the position of DD_4 to be determined by that of DD_3 , lying below it for all values of x in respect of which DD_4 is inclined positively and above it for all values in respect of which DD_4 is inclined negatively.¹

§ 6. Thirdly: consider the relation subsisting between the supply curve and the two curves of private marginal supply prices and average full expenses of production.

Primâ facie, it seems evident that the supply curve SS_1 and the curve of private marginal supply prices SS_2 must be identical. Equivalence between these two curves is not, however, possible if the private marginal supply price of any quantity x multiplied by x is less than the average full expenses of production

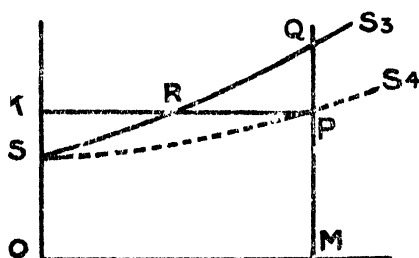


FIG. I.

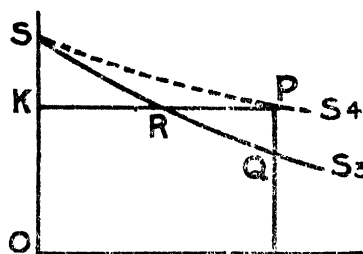


FIG. II.

multiplied by x . For if, in these conditions, a quantity x were sold at the private marginal supply price, the industry as a whole would be yielding less than normal returns, capital and labour would be driven out of it, and the quantity x would not continue to be called out by the private marginal supply price of the quantity x . Therefore, in the conditions stated, the supply price of a quantity x is greater than the private marginal supply price of this quantity. It is evidently equal to the average full expenses of production of a quantity x . Hence it follows that the supply curve SS_1 is coincident with the curve of private marginal supply prices SS_2 for values of x in respect of which SS_2 lies above SS_4 : and is coincident with the curve of average full expenses of production SS_4 for values of x in respect of which SS_2 lies below SS_4 . This proposition holds good whether SS_4 is inclined positively or negatively. If in the annexed figure $S R K S_2$ represent the curve of private marginal supply prices and $S Q K S_4$

¹ Cf. my paper "Monopoly and Consumers' Surplus," *ECONOMIC JOURNAL*, xiv., p. 388.

the curve of average full expenses of production, the supply curve will be represented by $S R K S_4$.

The general result thus reached has a corollary in the special case where the curve of private marginal supply prices and the curve of collective marginal supply prices are identical. For in that case our reasoning shows that the supply curve is coincident with the curve of collective marginal supply prices SS_3 for values of x in respect of which SS_3 lies above SS_4 , and is coincident with the curve of average full costs of production in respect of all other values. But in § 5 it was proved that SS_3 necessarily lies above SS_4 for all values in respect of which SS_4 is inclined positively and below SS_4 for all values in respect of which that curve is inclined

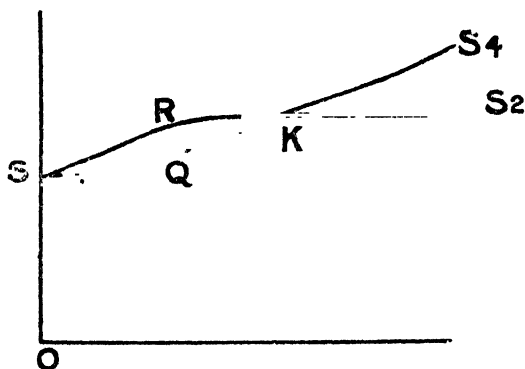


FIG. III.

negatively. Hence, in the special case when the curves of private marginal supply prices and collective marginal supply prices are identical, the supply curve, for all values in respect of which it is inclined positively, coincides with the curve of collective marginal supply prices, and for all values in respect of which it is inclined negatively, with the curve of average full expenses of production.

The relation subsisting between the demand curve and the two curves of private marginal demand prices and average full yields of ophelimity is exactly analogous to the above relation. The demand curve DD_1 is coincident with the curve of private marginal demand prices DD_2 for values of x in respect of which DD_2 lies below DD_4 ; and is coincident with the curve of average full yields of ophelimity DD_4 for values of x in respect of which DD_2 lies above DD_4 . This proposition holds good whether DD_4 is inclined positively or negatively. The general result has a corollary in the special case where the curve of private marginal demand prices and the curve of collective marginal demand prices

are identical. This corollary is to the effect that the demand curve, for all values in respect of which it is inclined negatively, coincides with the curve of collective marginal demand prices, and, for all values in respect of which it is inclined positively, with the curve of average full yields of ophelimity.

§ 7. The analysis which has just been carried through enables us to approach the problem of measuring producers' or consumers' surplus in terms of money. The argument is precisely analogous in respect of both sorts of surplus. I shall, therefore, develop it only in respect of one sort, namely, producers' surplus.

The most general solution of the problem is as follows :

With the notation employed above construct the annexed diagram (Fig. IV.).

If a quantity OM is produced of which the supply price is PM and the average full expenses of production QM , the pro-

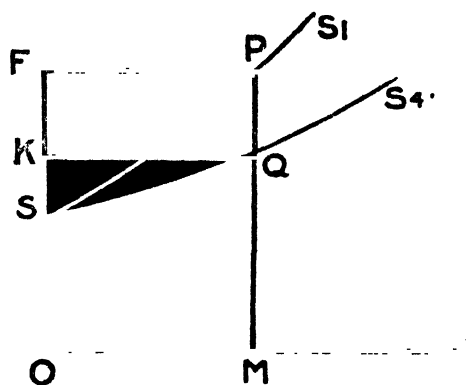


FIG. IV.

ducers' surplus is under all circumstances measured by the rectangle $PQKF$. As was shown in § 6, P may in some circumstances coincide with Q . In this case the surplus will be zero. It is impossible that the surplus should be negative, and it is possible that it may be very large.

When the supply curve is inclined positively throughout its length, the above method of measuring producers' surplus can be brought into relation with Dr. Marshall's analysis by a different treatment. Construct a figure (Fig. V.) showing the position of the supply curve and also of the curve of collective marginal supply prices SS_3 . Take any point P on SS_1 and through P draw MPQ and PR parallel to the axes of Y and X respectively. Then, when a quantity OM is being sold at the supply price PM , it is obvious that the producers' surplus is equal to the rectangle

$ORPM$ minus the area $OSQM$. If the conditions are such that the curve of collective marginal supply prices coincides with the supply curve, this magnitude is equal to the area SPR . If SS_3 lies below SS_1 , it is equal to the area SPR plus the area SPQ ; if SS_3 lies above SS_1 , it is equal to the area SPR minus the area SPQ .

This completes the argument as regards producers' surplus. To adapt it to the case of consumers' surplus merely verbal changes are required.

§ 8. These results lead to a conclusion of some importance in connection with the doctrine of *maximum satisfaction*. Draw the supply and demand curves SS_1 and DD_1 , and also the curves

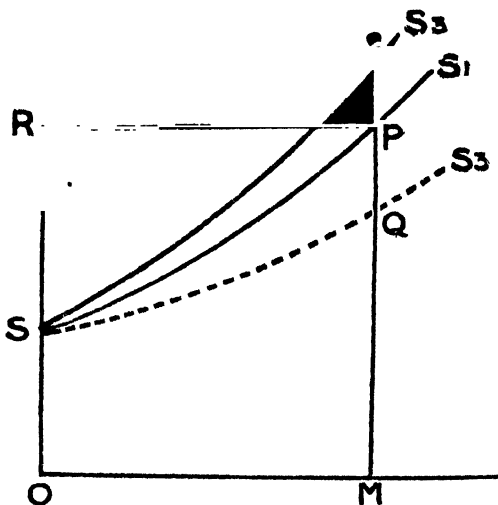


FIG. V.

of collective marginal supply prices and collective marginal demand prices SS_3 and DD_3 . Let SS_1 and DD_1 intersect at P , and let PM be drawn vertically to the axis of X . It is often implied in popular argument that producers' surplus and consumers' surplus in terms of money are necessarily maximised, in these circumstances, by the production and consumption of OM units of the commodity. From our analysis, however, it is clear that the sum of these two surpluses is a maximum when ON units are being produced and consumed, ON being the quantity corresponding to the intersection of the curves SS_3 and DD_3 . This quantity ON is only identical with OM provided that the distance by which SS_3 lies below (or above) SS_1 at the point corresponding to the production of OM units is equal to the

distance by which DD_3 lies below (or above) DD_1 at this point. This condition obviously includes the special case in which SS_1 coincides with SS_3 , and DD_1 with DD_3 . Apart from this condition, ON may be either greater or less than OM , according to the relations that subsist between the curves. Where ON is greater than OM , the grant of a bounty on the production of the commodity, provided that the bounty is not large enough to expand production beyond ON , and provided that no cost is involved in the levy of the funds from which the bounty is drawn, must, other things equal, be socially advantageous. Where ON is less than OM , the imposition of a tax on the production of the commodity, provided that the tax is not large enough to

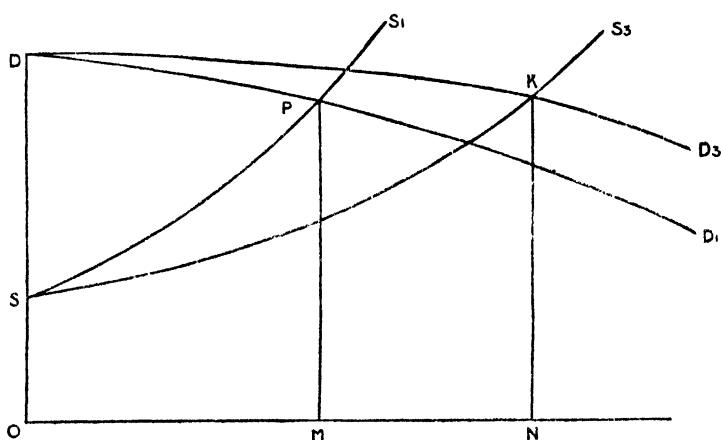


FIG. VI.

contract production below ON , must, other things equal, be socially advantageous.¹

§ 9. Up to this point the argument has been absolute, and no reference has been made to matters of probability. One step into that debatable ground may, however, be taken with advantage at this point. We may conceive the private marginal supply price of any quantity x as made up of two parts, the magnitude of one of which depends on the aggregate output x and that of the other on the output x_r of a typical individual producer. That is to say, the private marginal supply price of x unit is $\{fx_r + \phi x\}$. Let the output increase from x to $(x + \Delta x)$, and let Δp_1 be the corresponding change in private marginal supply price, and Δp_2

¹ These results are not, of course, contradictory, but merely supplementary, to those established by Dr. Marshall in his *Principles* (p. 467, *et seq.*).

the corresponding change in collective marginal supply price. Then it is plain that

$$\Delta p_1 = \Delta x f' + \Delta x \phi' \quad \text{and} \quad \Delta p_2 = \Delta x f' + \Delta x \phi' + x \phi'.$$

Now in some cases where f' differs in sign from ϕ' , the signs of Δp_1 and Δp_2 will be different. But in all cases where f' and ϕ' have the same sign, and in many cases where they have a different sign, the signs of Δp_1 and Δp_2 will not be different. Therefore, it is *probable* in general that these signs will not be different. That is to say, it is probable that the curve of private marginal supply prices SS_2 and the curve of collective marginal supply prices SS_3 will be inclined in the same direction. But, when SS_3 is inclined negatively, it lies below SS_4 , which, when SS_1 coincides with SS_2 , cannot lie above SS_2 . Therefore, when SS_1 coincides with SS_2 , and is inclined negatively, it probably lies above SS_3 . When SS_1 coincides with SS_4 and is inclined negatively, it necessarily lies above SS_3 . But SS_1 must coincide with either SS_2 or SS_4 . Therefore, it is probable that when SS_1 is inclined negatively, it lies above SS_3 . But, if SS_1 lies above SS_3 , it is probable, since DD_1 is as likely to lie below as above DD_3 , that the point of intersection between SS_1 and DD_1 will lie to the left of that between SS_3 and DD_3 . Hence, when the supply curve SS_1 is inclined negatively, that is to say, in cases of increasing return as ordinarily understood, it is probable that ON will be greater than OM . In all cases, therefore, when increasing return is known to prevail, and when nothing else is known, it is probable that the grant of a bounty at a rate not exceeding some definite but unknown amount, would prove socially advantageous.

An analogous proposition, to which, however, no practical importance attaches, can be established in regard to cases where, instead of the supply curve being inclined negatively, the demand curve is inclined positively.

§ 10. There remains one further question upon which, as it seems to me, the preceding analysis throws light, the question, namely, to what extent output will be contracted if, all other things remaining the same, an element of monopolistic power is introduced among the sellers or the buyers. As the analysis is substantially the same in both cases, I shall deal here with a sellers' monopoly only.

This problem is complicated by the circumstance that monopolisation, apart altogether from the introduction of new economies, which are not relevant to this discussion, may alter the position of the curve of private marginal supply prices. If,

before monopolisation, the curve of private marginal supply prices and the curve of collective marginal supply prices coincide, it will not, of course, have this effect. If, however, before monopolisation, the curve of private marginal supply prices differ from the curve of collective marginal supply prices, it must have this effect, because, when there is only one producer, private and collective marginal supply prices are necessarily identical.

Let us begin with the case in which SS_2 and SS_3 are identical both before and after monopolisation. Then, as explained in § 6, the supply curve SS_1 , for all values in respect of which it is

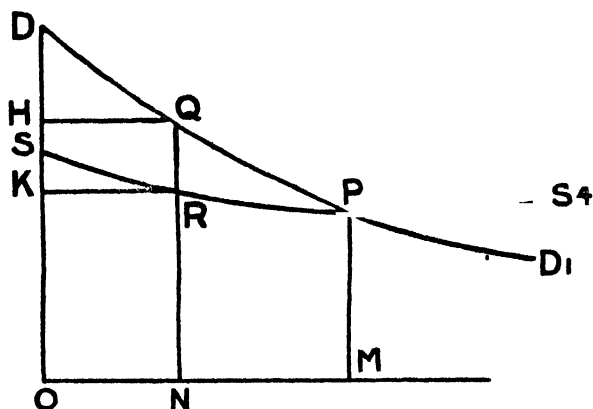


FIG. VII.

inclined negatively, coincides with SS_4 , and, for all values in respect of which it is inclined positively, with SS_3 .

First, let the supply curve be inclined negatively, and, therefore, coincide with SS_4 (Fig. VII.). It is then obvious that if P be the point of intersection of DD_1 and SS_4 , and if PM be drawn vertically to the axis of x , the output under free competition will be measured by OM . In like manner the output under monopoly will be measured by ON where ON is such that the rectangle $QHKH$ is a maximum.

Secondly: let the supply curve be inclined positively and, therefore, coincide with SS_3 . If (Fig. VIII.) SS_3 and DD_1 intersect at P and PM be drawn vertically to the axis of x , it is obvious, as before, that the output under free competition will be measured by OM . The output under monopoly is not, however, in this case determined unambiguously.

If the monopolistic body is interested in producers' surplus, the quantity of output ON produced under monopoly will be such that ON multiplied by the vertical distance cut off between DD_1

It is interesting to note that, when the curves involved are straight lines, this comparison has an exact result. Let DD_1 be inclined to the horizontal at an angle θ and let SS_3 be inclined at an angle ϕ . Let the output under free competition be α . Then, if the monopolistic body disregards producers' surplus, output under monopoly will be equal to $\frac{1}{2}\alpha$: if it regards producers' surplus, output will be

$$\frac{\tan \theta + \tan \phi}{2 \tan \theta + \tan \phi} \alpha.$$

There remains the case in which monopolisation alters the position of the supply curve, the case, that is to say, in which, under free competition, the curve of private marginal supply prices differs from the curve of collective marginal supply prices. In that case output under free competition is determined by the intersection of DD_1 with SS_2 instead of with SS_4 or with SS_3 . Output under monopoly is determined according to circumstances in one of the ways described in this section. Hence the difference made to output by monopolisation is determined. This completes the solution of the problem.

A. C. PIGOU

THE DOCTRINE OF MALTHUS AND THE INCREASE OF POPULATION DURING THE LAST DECADES.¹

THE rate of increase of population, during the last decades has been in such conspicuous contradiction to what the teaching of Malthus would have led us to expect, as to call for a renewed examination of these doctrines in the light of the experience of to-day. This examination I have made in a treatise, with full statistics, which was published by the Royal Bavarian Academy of Sciences. I should exceed the space which the ECONOMIC JOURNAL is able to place at my disposal if I attempted to reproduce these statistics here, and must therefore confine myself to stating in condensed form the results which can be deduced from them.

Malthus maintained that mankind had a natural tendency to increase faster than the means of subsistence. The capacity and the desire for reproduction were alike greater than was necessary to compensate for the loss by death, and both the former remained constant. Hence there was a permanent disproportion between the number of human beings in existence and the amount of food required for their support. There were two methods by which equalisation could be established: by misery and crime, or by moral continence. Hitherto only the former had been effective. As soon as the means of subsistence rose above the measure of the absolute necessities of life, numbers would increase until wretchedness pressed back the position of the population to its former level. A permanent improvement, therefore, in the condition of the lower classes could not take place until there had been a general spread of moral continence.

What do the facts since 1871 show? The condition of the lower classes has admittedly improved during this period in a hitherto unprecedented degree. This has been proved in the case of England by Bowley, but it is no less true of all the Western European nations, of America and Australia. Accord-

¹ For a fuller statement of the author's views, see *Transactions of the Historical Section of the Royal Bavarian Academy of Sciences*, vol. xxiv., class iii, p. 567.

ing to Malthus, this increase in prosperity should have been followed by a general increase of population. And this has been the case. But did it take place in the manner predicted by Malthus—by a general increase in the number of marriages and births?

Malthus starts—apart from the incorrect statistical basis of his doctrine, into which I cannot enter here—from two erroneous psychological principles :—(1) The supposition that the cause of the increase of the human race is the desire for propagation, and (2) that this remains constant in all circumstances.

But there is no such thing as the desire for propagation. The causes responsible for the increase of population are the desire for sexual intercourse and the love of children. But sexual desire is under the influence of mental activity, an influence which is capable not only of stimulating and increasing, but also of diminishing it, which, in short, can regulate its activities. And the love of children manifests itself in more ways than the mere bringing of them into the world.

Sexual desire is indeed the most powerful of all impulses. At a low stage of civilisation it acts with the same elementary force as among animals, and the same applies to the lowest classes and individuals of a more civilised era. In these cases the love of children is a negligible factor in the man's life, their care being entirely relegated to the woman. A change in this state of things occurs as soon as a large family brings with it consideration, influence and power. The man at this point also begins to wish for children, for the more numerous these are, the more he becomes a person of consequence and influence. Wherever, at this stage of civilisation, sexual intercourse has taken on the form of marriage, every man strives to marry as soon as he has reached the age of puberty. Marriage appears so essential that anyone who remains single is looked upon as an almost unnatural being, and is certainly despised.

It often happens that moral conceptions survive the primitive circumstances out of which they have evolved. So it has come about that even among nations that have attained a high degree of civilisation, a single life is held to be morally reprehensible, and marriage is regarded as a duty for men and women. Even at a primitive stage, however, certain limits to the contracting of marriages had to be observed. As soon, for example, as a wife had to be bought, the man who wished to marry had to be able to produce the purchase-money. Such obstacles, however, are not absolutely effective. A more effective check was

given to the birth-rate by the change in economic conditions which took place when a large family, instead of being an advantage, began to occasion expenses, which constituted a definite burden. A second check was produced by the working of a real increase of refinement on the character of mankind.

The influence of these changes becomes apparent (1) if we compare the increase of population in the upper with that in the lower classes, wherever the necessary data exist; (2) if we consider the increase of population which has accompanied changes in the economic conditions of the mass of the people; and (3) if we compare the relative increase in population in countries where better economic conditions prevail with those in which the conditions are not so good.

A decline in the birth-rate may be due to one of two causes: to the diminution of marriages or to the diminution of the number of births per marriage.

According to the valuable statistics collected by Pontus E. Fahlbeck for Sweden and Finland, the number of married persons among the nobility and the upper middle classes is 10 to 23 per cent. less than among the entire nation; also the average age at marriage of the men is higher in the upper than in the lower classes in both these countries; not so, however, the average age at marriage of the women. The same facts are brought out by a comparison of the average age at marriage in the various occupations in Copenhagen, Rotterdam, Dordrecht, England and Prussia. In Great Britain and Ireland there is further, since 1891, a decrease in the number of married persons, and since 1873, in spite of rising wages, a decline in the marriage-rate. According to Malthus, a rise in wages must have produced an increase in the number of marriages. So also we find a decline in the marriage-rate of Russia, Hungary, Servia and Italy. The decline in the United States, in Chili, Uruguay and in the Australian States, with the exception of Western Australia, is specially remarkable, for in America and Australia the number of persons of marriageable age is constantly increased by immigration.

In the German Empire, on the other hand, the number of marriages increased between 1881 and 1900, as did also the number of married persons. During the same period the marriage age, both of men and women, fell, especially in the towns. The greatest number of marriages took place in the large towns with a growing factory population, while in the towns inhabited

by millionaires¹ and prosperous citizens the number of marriages declined. A similar increase of marriages may be noted in the remaining countries, not yet specified above.

How are these phenomena to be explained?

A certain falling-off in the percentage of marriages is simply explicable by the decline in the rate of mortality. Out of every thousand inhabitants there is a larger number between the ages of 15 and 40 to-day than there was in 1871. It happens less frequently therefore that marriages are dissolved by death, where, had this been the case, the survivor might have been disposed to re-marry; hence a decrease in the number of widows and widowers who would have started a fresh union.

This, however, can be responsible for a proportion only of the decline in the marriage-rate where this exists, and as a matter of fact it is precisely among first marriages that the decrease is found to have taken place.

In order to explain these phenomena, I will start with the upper classes, among whom alone the decrease in the frequency of marriage is found in *all* civilised countries. The conclusions at which we shall arrive will throw light alike on the cases where the decline in the marriage-rate has spread to all classes of the population, and on those where the marriage-rate has risen. The decline in the upper classes can be explained:—

1. As a consequence of the increased demands made on persons of the upper classes by education and preparation for their future avocations. A man needs more time to obtain the training necessary to fit him for the earning of his livelihood. Consequently, the higher his social and professional rank, the later he will marry, and there will be a relative increase in the number who remain unmarried.

We can explain on the same lines the increase of marriages in the German Empire, the fall of the marriage age in Prussia, its special fall in the Prussian towns, and, above all, in the large towns with a growing factory population. The majority of the population here has experienced in the last decades a change of economic conditions which has made marriage easier, for the increasing industrialisation of Germany falls within this period. The agricultural labourers, who had until then been obliged to emigrate in order to marry, because no dwelling was obtainable in the country, now moved into the German towns, and more especially into the centres of the great industries. As factory workers they succeeded in making a home at a much earlier age.

¹ [Millionaires must be interpreted in marks. *Translator's note*].

The same conditions prevail in other countries where the marriage-rate is rising and the age of marriage falling.

Great Britain, on the other hand, has long since been industrialised; the effects on the facilities for founding a home, of the transition from a predominantly agricultural to a predominantly industrial state, have long since worked themselves out. Here, on the other hand, the rise of the standard of comfort among the working classes places obstacles in the way of marriage exactly as it does among the upper classes. In America and Australia the decline of the marriage-rate, in so far as it is not attributable wholly to the scarcity of women, may likewise be traced to the increased standard of life among the lower classes.

In Norway and Sweden the marriage-rate fluctuates fairly regularly in inverse ratio to the rate of emigration. The decline of the Italian rate is apparently connected with the increase of emigration out of the country. Conversely the recent rise of the marriage-rate in Ireland and Spain may be connected with the decline of emigration from these countries. The extraordinarily high marriage-rate of Servia, of Hungary with its strong Slavonic element, of Saxony with its numerous factories, as also that of unpretending Japan, can be explained by the fact that the demands made on the education and preparation for a man's future occupation are relatively small, owing to the modest standard of comfort which obtains in these countries, or the greater facilities they afford for making a home.

2. Another cause responsible for the decrease of marriages among the upper classes is the growing difficulty of supporting a family in the face of increasing social requirements. This cause made itself felt earliest among the nobility, and most powerfully, where, owing to the system of primogeniture, the younger children were unable, if married, to live in accordance with the requirements of their rank. The decrease has been most marked since the ancient privileges of rank in the matter of public appointments and ecclesiastical preferment have yielded to the equalisation of rights, a process which coincided with a shrinking of the emoluments attached to the offices in question. Since when there has been the greatest number of bachelors and spinsters in families whose fortune consists solely of entailed estates.

With the rise in the standard of living, this tendency spread from the nobility to the upper classes in general. Here, too, marriage as a rule means retrenchment, and so a comparatively large number of persons remain unmarried.

3. A powerful influence for the decline of the marriage-rate is the altered position of woman. In the process of time, from man's slave she has become his companion, and, in accordance with the most recent developments, often even his competitor. Hand in hand with her growing independence came a rise in the social consequence of the unmarried woman. This was bound to react on the attitude of women towards marriage. It may be that the large increase in the proportion of women earning their own livelihood, which took place just between 1895 and 1907, is connected with the decline in the German marriage-rate, which until then had risen, and began, between 1901 and 1905, to decline from 168 to 160. In Great Britain the decrease in the frequency of marriage set in much earlier, and points even more conclusively to its connection with the strivings of women after economic emancipation, a phenomenon which made its appearance much sooner in that country than in Germany. It is clear that the increasing economic independence of woman must diminish the force of one of the motives that leads her to marry. She becomes less ready to undertake the work of a housekeeper under the disadvantage of not being able to give notice; she frequently feels no inclination for the burdens which marriage would put upon her; she is less inclined to submit to a man's will, occasionally she agrees with Bernard Shaw in denouncing the home as "the girl's prison, the woman's workhouse." In short, she is less disposed to marry as her grandmother did, because, as a matter of course, a girl marries as soon as a suitable opportunity offers. She is more apt to reject one suitor in order to wait for a better man. She will look for real feeling as the decisive factor in the case, and will prefer to remain single rather than marry without affection or inclination.

This influence becomes the more effective the greater the number of enjoyments which enter into competition with the amenities of married life. The increase of new inventions and discoveries, of trade and travel, the general spread of education and culture have widened the circle of interests and the tastes of both men and women, have increased their requirements and made many new pleasures accessible to them. Hence the home has lost its paramount importance for the man, and also for the woman; the share of life's joys which marriage contributes to happiness has decreased in proportion as these other joys have increased. And where married life would, for the persons concerned, be incompatible with the satisfaction of these new requirements, whether for pecuniary or other reasons, marriage is

often renounced altogether. Hence the decline of the marriage-rate more especially among the upper classes. But this also explains why the percentage of marriages decreases among the people as a whole, as the nation ascends in the scale of civilisation. The desire for marriage decreases in proportion as the pleasures increase which are accessible to everyone, but which, for the reasons already specified, must be renounced on marriage.

5. Lastly, there is no doubt that among the upper classes the mutual satisfaction of the sexes is not so great as it used to be. The woman's greater independence, her increased culture and more self-reliant judgment—in short, all that which we reckon as progress—have contributed to this result. She has become more critical. On the other hand, just in proportion as she is less anxious to encourage a man to offer marriage, so he has become less inclined to make the offer; perhaps, indeed, his inclination has suffered even more than hers. The female sex still cherishes more illusions on the score of marriage than the male, and the later the age to which modern developments tend to postpone marriage, the more completely has a man lost his illusions by the time his finances would allow him to marry. It is just this greater independence of the woman, this increased culture and more self-reliant judgment, which make marriage appear less comfortable and desirable to many a man. At a higher mental and moral level, however, this diminished mutual satisfaction of the sexes is rooted in a nobler cause. The spread of culture and refinement, a higher conception of what marriage as a union should achieve, makes it more difficult for man and woman alike to find someone whom either will be prepared to accept as a companion for life. Each will exact more, will have a higher standard; each is less able to find someone who comes up to the ideal, or to achieve the ideal required by the other.

But however important the marriage-rate may be for the birth-rate, yet only about one-fourth of the total number of births fall to the new marriages. It is not the marriage-rate, therefore, which turns the scale in the question of population. If it did, the increase of population of France, for example, would be greater than that of Bavaria, for the French marriage-rate between 1901 and 1905 was 153, while the Bavarian was only 152. Nevertheless France would, at the existing rate of increase, take 367.1 years to double her population, while Bavaria would do so in 53.1 years. Moreover all European, Australian and the majority of American States, whether their marriage-rate has risen or fallen, have experienced a decline in their birth-rate during the

past thirty years. To all appearances, then, it is not the marriage-rate, but the number of births per marriage which decides the question of population. This, too, shows a decline of fertility in most European countries, among the white inhabitants of the United States, and in Australia. What is the cause?

An attempt has been made to explain the situation by the fact that the death-rate has declined with the increasing prosperity of the last decades. The average length of life has increased. Hence the character of the population has changed: those who have passed the prime of life have relatively increased, and the number of persons producing children has diminished in proportion. When however we find that in 1880, 389 out of every 1,000 inhabitants of the German Empire were between 15 and 40 years of age, while in 1890 their number had increased to 395, it turns out that the decade in which the birth-rate fell from 392 to 360 was precisely the period during which there had been an increase in the number of persons of the most fertile age, and a decrease of emigration.

Similarly statistics show that in England and Wales, Scotland, Norway, Sweden, Prussia, Holland, Belgium and France, all countries where the birth-rate has fallen, there is to-day a much larger number of persons of both sexes at the productive age than ever before.

The only possible explanation, therefore, of the diminished birth-rate is the decline in the average number of births per marriage. This phenomenon first made its appearance in France, where, since the reign of Louis XVI., the birth-rate has declined steadily from decade to decade. It stood at 39 at the beginning of this period, and at 23·3 during the years 1901-1905. To understand these facts, we have only to compare the number of births among the well-to-do with those among the poor.

According to the calculations of Bertillon, the following relation obtained in France in 1862 between frequency of birth and the possession of real estate. In 30 departments, in which 285 out of every 1,000 inhabitants owned land, the birth-rate was only 24·78 per 1,000; in 31 departments, which averaged 240 landowners out of every 1,000 inhabitants, these accounted for 25·70 births; in 21 departments, where the number of landowners had fallen to 177 per 1,000 inhabitants, the number of births rose to 28·10. The more proletarian the department therefore, the higher the birth-rate, and *vice versa*.

A comparison between industrial and agricultural departments leads to the same conclusion, and this is further confirmed by a

consideration of the state of affairs in the departments where there are many prosperous peasant proprietors. The birth-rate in the industrial departments "Nord" and "Pas de Calais" has fallen only very slightly during the nineteenth century; in the department "Seine-Inférieure" it has even risen: while in the more prosperous departments "Yonne," "Côte d'Or," "Charente," "Puy-de-Dôme," "Gers," "Garonne," "Lot-et-Garonne," "Maine-et-Loire," with their well-to-do peasant population, it has diminished by one-half. On the other hand, in Brittany, as well as in the departments of Corsica and Losère, where the peasant population is poor, the birth-rate is as high as in the industrial districts. Such increase of population as France can still show is due to the increase in the two industrial departments Nord and Pas de Calais, but for which the deaths would actually outnumber the births in France.

The same conclusions may be drawn from the statistics of Kiser, according to which the majority of marriages in the prosperous departments of Seine, Côte d'Or, Orne, Lot-et-Garonne produce only one or two children, while in the poor departments Finistère and Corsica, and the industrial department Pas de Calais, a very small percentage of the marriages produce as few as one or two children, and the majority show a larger number.

A comparison of the various towns with each other points to a similar conclusion. As early as the thirties of last century it was shown by Hippolyte Passy that the towns inhabited by the upper and lower bourgeoisie had a very low birth-rate, while the towns with a large working population had a high one. Thus according to his calculations the proportion of births to marriages in the towns of Tours, Versailles and Angers was only 2.5-2.6, while it was 4.6 in the manufacturing town of St. Etienne, and about 4 in Nîmes and Boulogne. Passy had already noted that the birth-rate in the manufacturing towns was greater than the general French average.

The same connection between prosperity and the birth-rate is shown by the figures collected in 1886 by Tallquist. The smaller the sum of estate, door and window tax per head of the population yielded by the different departments, *i.e.*, the smaller the means of the inhabitants, the greater was the number of legitimate births that fell to the share of every thousand married women, and *vice versa*.

And still the same results follow from a comparison of the birth-rate and the prosperity of the several quarters of Paris: the more prosperous the quarter, the less fertile its inhabitants.

When the decline of the birth-rate in France had been conclusively proved, this was at first regarded as an exclusively French peculiarity, and the criticisms passed were friendly or the reverse according as a low birth-rate was held to be an advantage or a misfortune. Since the seventies of the nineteenth century, however, the tendency of the number of births per marriage to decline with the increasing prosperity of the people seems likely to become universal. Even nations hitherto renowned for their wealth of children are visibly becoming subject to the same fate as France.

This is especially noticeable in Great Britain and Ireland. In England and Wales the birth-rate rose during every period of five years beginning from 1841-1845, until between 1871 and 1875 it reached its maximum of 355 births to every 10,000 inhabitants. Since then it has fallen uninterruptedly. In the period 1901-1905 it had fallen as low as 281. The birth-rate of Scotland and Ireland moves in the same direction, though for different reasons.

In Ireland the birth-rate fell from 2,384 to 2,348 for every 100,000 inhabitants during the decade 1881-1891. But, as Sidney Webb has pointed out, the number of married women of child-bearing age in proportion to the total population diminished so much during this period that, in spite of the trifling decline shown by the birth-rate, there is actually an increase in the fertility of the marriages. If the proportion of the ages and sexes in Ireland had been the same in 1901 as in 1881, the Irish birth-rate would have been 3 per cent. higher in 1901 than in 1881.

The case is different with Great Britain, where there is no such cause to account for the decline in the birth-rate. Had the proportion of the different ages in the population of England and Wales remained constant between 1861 and 1891, and had the division into married and unmarried remained exactly proportionate, the number of births per 100,000 inhabitants would still have fallen as follows:—

1861	...	...	...	3,236
1871	...	...	...	3,312
1881	...	...	...	3,273
1891	...	...	...	3,125
1901	...	...	...	2,729

In other words, had the fertility of the married women remained constant, there would have been 21 per cent., or, in

actual figures, about 200,000 more children born in England and Wales in 1901 than has been the case.

I have already dealt with the decline of the marriage-rate in Great Britain consequent on the rise in the standard of comfort of the working classes. That the increase of wealth and the rise in the standard of comfort are responsible also for the diminution in the number of births per marriage, is proved by a comparison of the birth-rate in different districts according to the number of domestic servants employed there—that is, according to their degree of prosperity. The corrected birth-rate for Bethnal Green—the district of London which has the smallest number of non-Londoners, and where the proportion of inhabitants who keep servants is smallest—fell between 1881 and 1891 by 12 per cent., *i.e.*, by exactly as much as that of the North Riding of Yorkshire. In Hampstead, on the other hand, which keeps the largest number of servants in proportion to its inhabitants, the rate fell no less than 36 per cent. Next to Hampstead come Kensington and Paddington, which keep servants in almost the same proportion as Hampstead: their birth-rate, which was already lower than that of Hampstead, has fallen 19 per cent., and is now less than two-thirds the rate of Bethnal Green. Dr. Newsholme and Dr. Stevenson on the one hand, and Udny Yule on the other, have compared the corrected birth-rate of five groups of London districts, differentiated according to their average poverty. The result shown is that the small group of three “wealthy” districts numbers 2,004 births in wedlock for every 100,000 inhabitants; the four groups which include nineteen districts of medium prosperity have between 2,362 and 2,490 births; while the poorest group, which includes seven districts, has no fewer than 3,078 legitimate births—*i.e.*, 50 per cent. more than the wealthy districts.

But the decline in the number of births is not confined to the propertied classes. Skilled artisans, as John Stuart Mill had already pointed out, have smaller families than unskilled labourers. Quite recently Sidney Webb has shown that the “maternity” payments made between 1866 and 1904 by the Hearts of Oak Society, to which only the aristocracy of the English working classes belong, have diminished in every consecutive period of five years since 1871–75, in consequence of the diminution in the number of births.

In all these cases, then, we have an intentional limitation in the size of the family, whether the motive be the disinclination of the parents to being hampered in the enjoyment of other

pleasures, or their fear of losing the earning capacity which renders these other pleasures accessible.

Another proof of the connection between wealth and the birth-rate is afforded by the investigations of Verryn Stuart into the number of births in proportion to the rent of dwellings. This inquiry embraces Rotterdam, Dordrecht and forty country communities of Holland. Fahlbeck has shown that in Sweden and Finland the nobility, the teachers in the two State Universities and those in the higher educational institutions are the least fertile members of the population. For Italy we have Del Vecchio's interesting proof that the birth-rate is highest in the districts which contain the largest numbers of persons who have not learnt to read; that it is lower in districts which have a medium number and lowest in those which have the smallest number of absolutely illiterate persons.

In Germany, Kiaer was the first to prove, by comparing the births in a wealthy and in a very poor district of the town, that the birth-rate is higher in the poorer district throughout, and that the latter has much fewer childless marriages than the richer district. Then Mombert made investigations in seven large towns, Berlin, Hamburg, Leipzig, Munich, Dresden, Magdeburg and Frankfort-on-Main, taking the average rent of the dwelling as the measure of prosperity of the different districts. He proved conclusively that fertility decreases with increasing prosperity and increases with diminished prosperity, and he showed that this tendency does not depend upon differences of rank, nor require that the difference in means and social position shall be very great, but makes itself felt even where the differences are slight. He proved that even among the unpropertied classes improved economic and social conditions tend to decrease the number of births. Further, he proved that this holds good not only in large towns, but throughout Germany, and also that the callings and occupations which enjoy a higher social standing and command larger means, show in general a smaller degree of fertility per marriage.

But the decline in the birth-rate, as already mentioned, is not confined to the European countries cited above. It is also found in the United States of America and in Australia. As regards the former, Kuczynski has shown that the fertility of the whites born in the two New England States is now only half as great as that of the population of most European countries, and only three-quarters as great as that of France. During the first fifty years of the Republic on the other hand, the white population

had quadrupled itself by natural increase. The increase of the white population of the United States depends to-day on the continued immigration from Europe; if this were to cease, the North American Republic would, in view of the great fertility of the negro, become black in quite a short, predeterminable time.

And in Australia it was reported by a Royal Commission in 1904 that a serious decrease of fertility had taken place since 1889, chiefly owing to the artificial prevention of conception and the inducement of miscarriages, as well as to pathological conditions brought about by the use of preventive medicines. The Australian birth-rate is indeed the most remarkable of those already discussed. Statistics show that in this land, where the working classes are better off than anywhere else in the world, where they have the last word in politics, in this "working man's continent," the decline in fertility is almost the greatest of all. It equals the decline in the European countries of the lowest fertility, viz., Ireland and France, but far surpasses them in the speed with which this decline has taken place. The native white populations of Massachusetts and Rhode Island alone show a lower figure.

When we come to inquire into the cause of this phenomenon which accompanies increasing prosperity with such unfailing regularity, we must at the outset discard the hypothesis of any connection between it and religion or race. It made its first appearance in France, and at a time when France was admittedly still predominantly Catholic in spirit. Statistics show that among the Jews there is a diminution in the birth-rate in proportion to the increased prosperity of the people concerned. It is only among very poor Catholics or very poor Jews that we find a high birth-rate. The same applies to considerations of race. Prince Bülow complained most pathetically in the Reichstag of the greater fertility of the Polish women, and pointed to this as the chief cause for the ground gained by the Polish population in Germany. But the German women in the poor districts of Oberpfalz and Lower Bavaria are more fertile than the Poles. The Polish districts show the greatest fertility because they are the poorest and the most backward; the great majority of the Slavs form the quintessence of the proletariat in Prussia. We should be just as far from the truth if we attempted to trace the decline of the birth-rate to increased industrialism or to the growing tendency to live in towns. This hypothesis is refuted chiefly by the case of France since the beginning of the nineteenth century, more especially by the high birth-rate in the great indus-

trial departments Nord and Pas de Calais, and by the very low birth-rate among the prosperous peasant population of the agricultural departments, where the people live on the land. It meets with additional refutation from the Australian birth-rate since 1885. Nor do English statistics, as shown by Sidney Webb, afford any confirmation of this view. In Germany, indeed, the towns are less fertile than the country, and the birth-rate began to fall earlier there, and fell lower. This, however, is quite compatible with our position, since German prosperity, which, as shown by the statistics of Prussian incomes, increased throughout the State, increased most in the towns; the income tax for the years 1901-7 averaged 8'61 marks per head of the population in the towns, and only 2'15 marks in the country. Germany then forms no exception to the rule, and the increased prosperity in her towns must be acknowledged as the cause of the greater decline in the birth-rate, for this greater prosperity is accompanied to a very great extent by the welcome as well as by the unwelcome phenomena which lead to such a decline. The opposite relation between town and country, which is revealed by a comparison of the departments Nord and Pas de Calais with the country population of France, as well as by a comparison of the English towns and counties, is sufficiently explained by the fact that the lowest sections of the working population in the French departments and the English towns in question are generally below the level of the rural population. It may be said that where the rural population is very poor or coarse or uncultured the birth-rate in the country is very high, and much higher than in the towns; where, however, there is a preponderance of prosperous peasant inhabitants, or where the conditions of the country working population improve, the birth-rate declines, sometimes even more than in the towns.

It turns out, therefore, that differences of creed, race, occupation or domicile, which are adduced to account for differences in the rate of fertility, and all changes in the former which observers have claimed as an explanation of the decline in the latter, appear on closer inspection to reduce themselves to differences and changes in material prosperity. Moreover, economic conditions, as Mombert recognised, may influence the birth-rate in two directions. An improvement in economic conditions, especially when it follows on previous economic disturbances, increases the number of marriages in general, and therewith the number of young married couples, and so especially of married women at the child-bearing age. So far an improvement in

economic conditions tends to increase the number of births. But, as we have already pointed out, barely a fourth of the total number of births in a year falls to the newly-married. This tendency, therefore, cannot counteract the opposite influence which a permanent improvement in wealth and culture exercises on the remainder of the married population. This, as a comparison of different ranks, as well as of the same ranks and the same people at different stages of development, has shown us, results in a diminution of births. Thus the development of the German people, especially between 1890 and 1900, clearly shows that "in spite of increasing prosperity, in spite of the fall of the marriage age and the lengthened duration of marriages, the number of births has steadily declined." (Mombert.) In countries where the standard of comfort of the working classes began to rise earlier than in Germany—as, for example, in England—the improvement in their conditions led to a decrease even of the marriage-rate, and so to a diminution in the number of births due to fresh marriages.

But what can be the cause of this coincidence of decreased fertility with increased prosperity?

We must recognise as one of the causes the increase of certain diseases which go hand-in-hand with the development of wealth and culture described above. These are:—

1. The diseases of sex. These appear as a concomitant to the postponement of marriage; are found more frequently among the well-to-do than among the poorer classes, and consequently to a much greater extent in the towns, and especially in the large towns, than in the country. In the case of women, sterility or the capacity to bear only one child frequently follows on illnesses of this nature.

2. The same effect is produced by mental disease. The nervous strain induced by the increasing development of civilisation has led to an increase of mental disease, and it is not, as has been supposed, marriage which wards off mental disease, but rather the predisposition to this which prevents marriage.

3. The principal cause, however, of the decline of fertility is the diminution of the desire for reproduction. As prosperity increases, so do the pleasures which compete with marriage, while the feeling towards children takes on a new character of refinement, and both these facts tend to diminish the desire to beget and to bear children.

The competition of other pleasures makes itself felt in the case of the woman as well as in that of the man, though in a

different manner. In the woman it produces a distaste for the spending of her entire existence in pregnancy and child-bed; this distaste becomes more pronounced in proportion to the increased variety and tempting character of the pleasures which must be foregone. Even Adam Smith wrote: "A half-starved Highland woman frequently bears more than twenty children, while a pampered fine lady is often incapable of bearing any and is generally exhausted by two or three." So that the lower birth-rate of the upper classes was already known to Adam Smith, but he was mistaken in looking for the cause among physiological instead of psychological conditions. The same observation had been made by the ancients, and we find in Juvenal:—

"Sed jacet aurato vix ulla puerpera lecto";

and even the cause was by no means unknown to them. Thus Ovid had said:—

"Raraque in hoc aevo est, quae velit esse parens."

—(In nuce, v. 24.)

In other words, in the time of Ovid the reason why women did not have many children was not that they could not produce them, but that they did not wish to do so. This was the case, too, with the ladies of fashion in the time of Adam Smith, and the same applies to the society woman of to-day. She does not want to be cut off from all the joys of youth and all the pleasures which wealth can offer by a series of pregnancies following on each other in uninterrupted succession. In the case of other modern women the decline in the desire to have children, or at any rate, many children, is attributed to the movement for emancipation. Women who follow intellectual pursuits or who wish to live their lives to the full, desire to be hindered as little as possible by the duties which the nursery imposes; others who follow a profession feel themselves hampered by motherhood in the earning of money which would make other pleasures possible. And of the factory worker Sidney Webb points out that the protective measures which prohibit her from returning to work for a definite number of weeks after child-birth, deprive her of the means of subsistence, and she naturally seeks to avoid the recurrence of such an enforced stopping of supplies.

With this we enter on the domain of economic causes, which are especially responsible for the decline in the desire for reproduction in the case of the man. Not but that this is often due to consideration for the health of his wife. The chronic invalidism which is a frequent consequence of much child-bearing,

and more especially of confinements following each other in rapid succession, restrains the man from indulging in the gratification of his desires, wherever he has risen above the state of regarding the woman solely as an instrument of his pleasure. The most potent check, however, in his case is the consideration how far, if he were to call a great number of children into existence, the increased demand thus made on his resources would cut him off from other satisfactions. In the peerage it has been demonstrated that the conditions of the tenure of their possessions, together with the real or supposed duties of their rank, lead to such a limitation in the size of families that the majority of them die out in two hundred years. The advance in the technical arts, in trade and industry, in science and art, has made countless new pleasures accessible to everyone—pleasures, however, in which they can participate only if they can command the requisite means. This has popularised the state of affairs which at first was found only among the upper classes.

The greater delicacy of the feeling towards children works in the same direction. With increasing prosperity, mankind generally rises above the state of blindly giving way to its animal instincts, and so parents become more and more conscious of their responsibility both for the character and number of the human beings whom they bring into the world. This leads many weakly people to refrain from giving life to children to whom they might transmit their diseases. In other cases parents will rather strive to ensure to the children whom they have already brought into the world a good education and a larger patrimony, so as to equip them better for the modern struggle for life. Both these facts tend to restrict the number of births.

This limitation of the size of the family, in consideration of the children's welfare, makes its first appearance among the aristocracy, where anxiety prevails lest the splendour of the family name and tradition should suffer from the inability of too large a number of children to live up to the requisite standard. This is evident even now from the fact that the birth-rate among the peerage, where the family fortune consists only of entailed landed estate, is specially low. Here children are produced until there is a male heir; when this is achieved, no more are born, hence such families number more daughters than sons. On the other hand, where there is no entail, or where there are other possessions besides the land, the birth-rate is higher, and there are more sons than daughters. A similar consideration, not for the glory of the family name, but for the integrity of the farm, acts

on the peasants. Among the middle classes, too, including civil servants and officers, the same consideration for a better education and larger inheritance makes itself felt as prosperity increases. This is regarded as the principal cause of the decreasing fertility of marriages in America and Australia.

Another cause for the decline of fertility was found by Wappäus in the decline in infant mortality which accompanies improved conditions. According to him, parents who have a certain number of children living have not the same inducement to increase their families as those who have lost some of their children in infancy. Mombert is of the opinion that the great decrease of infant mortality in the towns, especially in Berlin, has been a contributing cause to the decline of the fertility of marriages. A more widespread prosperity has popularised the practice of the landed gentry with regard to the production of children.

The case is different with nations at a lower stage of civilisation and with the lower classes of the more advanced nations, in so far as the social conditions of the latter are in no way superior to those of the former. The more uncivilised the people, the lower the social class, the more eagerly woman is sought, either as a means of gratifying the sexual instincts, or for the sake of the work which she can accomplish; the younger therefore the age at which she becomes the object of desire. It is only when marriage ceases to be a merely physical union and becomes a union of souls, that man will look for a higher degree of intellectual development in the woman who is to be his wife. At a lower stage of civilisation, on the other hand, the pleasures of life consist almost exclusively in the satisfaction of natural instincts and desires. Hence at this stage the increase of population is conditioned solely by the increase of the means of subsistence, and the lower a people stands in the social scale, the more exclusively does the number of marriages depend on the results of the harvest.

Here marriage, as such, does not involve an immediate increase in the burden of life, but often quite the contrary; the woman works for her living, the income is doubled, and the expenses, until children arrive, are lower in proportion. Here regard for the children exercises no restrictive influence on the number of births, for the prospect of being able to help a few children on in life by more careful education or a larger inheritance does not exist. Nor are there at this stage any other pleasures to enter into competition with the satisfaction derived

from sexual intercourse. This can occasionally be confirmed by physicians with a large practice among the poor, even in Germany. When they enter homes of the most abject poverty, and make a remark on the large, and despite all the wretchedness, still increasing number of children, they are told of the part which sexual pleasures play in the lives of those who are debarred by circumstances from all other joys, in terms which, for cynicism of expression, far surpass the words of Diderot in "*Jacques le Fataliste et son maître*." I had myself a somewhat similar experience when, many years ago, I visited a number of workmen's families in the Saxon mining district. And a moment's consideration of the lives which these miners lead makes everything intelligible. The man goes down into the pit before sunrise, and, except during the summer months, the light has faded before he returns from his work. It is only on Sundays that he can see the world in all its colour and beauty. And when he comes home exhausted, what pleasures are still possible to his overwrought senses? We begin to appreciate the force of the passage in *Göhre*, where he tells us "that in the eyes of German working men, woman is nothing but an object for the satisfaction of sexual desire"; that woman among the German working classes is "valued much lower, considered much less, treated much worse," than in other ranks of life. It fits in with this that the woman in a home which I visited, had borne eleven children; several of these had died, others were playing about the room or crawling about the floor; a fairly grown-up one lay in bed, not because it was ill, but because it had no clothes; and in spite of this wretched poverty the birth of another was expected. But we need only read Zola's "*Germinal*" in order to understand why the mining population has the highest birth-rate.

Thus the different behaviour of different classes of the same people and of the same people at different stages shows that sexual passion is no constant and regular motive as Malthus assumed. It not only increases under the influence of cerebral activity, but it also decreases under the same influence. With increasing wealth and culture the variety of man's wants increases, and Gossen's law as to the limit up to which different kinds of pleasure are gratified, in order to realise the maximum of satisfaction on the whole, becomes applicable. Man limits his family when the increase of his family tends to diminish the sum total of satisfaction.

This limitation is in itself no virtue as it has been represented

by the Malthusians. It may be virtuous when prompted by altruistic motives. On the other hand, when one confronted with the choice between two pleasures prefers one to the other, this is evidently in itself neither moral nor immoral.

It is well known, too, that the diminution of the birth-rate which accompanies increasing prosperity does not imply an increase of sexual continence.

Yet another doctrine of Malthus has been refuted by actual developments. The increase of the means of subsistence at the disposal of European nations in the nineteenth century, stands in direct contravention to his doctrine of the disproportion between the growth of population and the increase of the means of subsistence. Malthus had no presentiment of the extent to which the progress of science and the adaptation of her discoveries to the uses of daily life, would give man dominion over nature, nor could he foresee the marvellous degree to which the people who utilise this progress are enabled to increase the sum of goods serving to their support. I have not space to sketch even in outline the progress which has been made in agriculture, trade, and industry since the time of Malthus. The most important step was taken when the discoveries of science were applied to commerce, and the boundaries of the land whose fruits are at the disposal of the people of Europe, were extended. And if strict Malthusians would object that the importation of the means of subsistence from hitherto uncultivated lands, only postpones the disharmony between the supply of food and the numbers of the population, and that the evil day must come eventually, we would maintain that this would only happen if, when the law of diminishing returns had come into operation over the whole surface of the globe, the rate of increase of the population remained constant. But this increase will not remain constant, as we shall proceed to prove.

It is, indeed, a most remarkable fact that in spite of the decline in the birth-rate, the surplus of births over deaths has never been so great as since the beginning of the seventies of the nineteenth century. The explanation is that if increasing prosperity has led to a decline in the birth-rate, it has been accompanied by an even greater decline in the number of deaths. The consequence has been an absolutely unprecedented increase of population, and if this were to continue at the same rate as within the last twenty-five years, there would in 893·35 years be one European to every square metre of surface of the globe; and if we include the other races, we should in 1,000 years stand

shoulder to shoulder. But the manner in which the increase of population has taken place since the *séventies*, brings with it its own corrective. Increasing prosperity has not led to that increase of the birth-rate predicted by Malthus, but to a relative diminution of births; and if the European peoples have increased so enormously in spite of this diminution, we owe it to the fact that the decline in the rate of mortality has been even greater. If, however, this satisfactory mode of increase continues, the rate of increase will of itself tend to become less, until it eventually ceases altogether. For mankind will never cease to die.

The increase of population during the last decades has, however, corrected more than the theoretical teaching of Malthus. It has also placed his practical conclusions, and the bogey of over-population which he had called into being, in quite a new light.

Malthus drew from his theory the conclusion that lack of sexual continence was the real cause of the sorry conditions universally prevalent among the lower classes; hence the indispensable condition of improvement was the spread of the virtue of continence among them; unless this came first any improvement in their lot would be but transitory, and would only lead to an increase of marriages and a diminution of infant mortality, until in consequence of increased numbers the condition of the lower classes was once more depressed to its former level. The idea of attempting to improve the conditions of the lower classes by sexual continence is so Utopian as to make the maddest socialistic and communistic dreams appear sober in comparison. For granting for the sake of argument that the lower classes of any country followed this counsel, the moment the effects of their conduct began to be felt in the labour market, no effort would be spared to attract labour from other countries, where the same continence was not in vogue. Wherever the condition of the working classes is above the average, this superiority has such a power of attraction for the working men of countries whose conditions are not so good, that any effort on the part of a working class to raise its position by sexual continence would be inevitably frustrated. In order to succeed, therefore, the sexual strike recommended would have to be international! On the other hand, the rate of increase of population during the last decades shows that this exhortation to sexual continence, apart from any question of its probable effectiveness, is not even necessary. It shows that the causal relation between improved conditions of living and the height of the birth-rate is the very opposite to that advanced by Malthus. It is not the spread of an enlightened continence

which is a *sine quâ non* of an improvement in the condition of the lower classes, but such an improvement in circumstances is itself a preliminary condition for the diminution of the number of births.

There is, therefore, no occasion for the panic of over-population which Malthus called into existence; on the contrary, there has arisen in many places the very opposite fear—an anxiety for the future of the civilised nations due to the low rate of increase of population during the last decades. The question is frequently asked: if increase of prosperity leads to a cessation of the increase of population, what will be the fate of the civilised nations of the world? But this anxiety is unfounded, so long as the civilised people continue to press into their service without remission all the progress of the technical arts and sciences, of industry and economic organisation, in order to overcome the difficulties which the increasing parsimony of the land opposes to the satisfaction of their needs. For the extraordinary increase of population of the last decades has been spread by no means evenly over the surface of the globe. We find it in Europe, among the nations of European descent, also in India, since this has passed under European administration, and in Japan since the latter has begun to Europeanise itself. Among all the other nations there has either been no increase of population at all during the nineteenth century, or at best but a trifling one; these are countries where there has been no progress or an insufficient progress in the technical arts and in economic organisation. Consequently in these countries every new-comer has only as much space as the previous occupant of a place vacates on his behalf. Here the teaching of Malthus holds good without reserve. Here man has the tendency to increase faster than the means of subsistence. The sexual instinct which leads to the increase of the birth-rate rules with undiminished sway. Whatever numbers are born over and above the limit that can be supported in the existing stationary state of the technical arts are swept away. The infant mortality is enormous, and it is only when wars and epidemics have raised the death-rate that a larger number of the young generation can be supported. Although their birth-rate is much higher than that of European nations, their increase has been much slower, where, indeed, there has been any increase at all. Because they remained opposed to progress, Europe, with its smaller number of births, has progressed at their expense. Europe sent out her sons to produce on the soil of which the others had hitherto been masters what Europe needed in exchange for her own products.

And what applies to the past applies equally to the present and future. It is only if a reactionary economic policy, which should aim at securing that every European country should, so far as possible, produce all the commodities which it required, were to gain the upper hand, that this would lead to a deterioration of the life of the European population, and, as experience shows, not to an increase in the birth-rate, but to a rise in the death-rate. Then they would be overpowered by the now uncivilised races, as the Roman Empire was overthrown by the barbarians.

L. BRANTANO

REVIEWS

The Common Sense of Political Economy, including a Study of the Human Basis of Economic Law. By PHILIP H. WICKSTEED, M.A. (London: Macmillan and Co. 1910. 8vo. Pp. xiv + 702.)

REFERENCES to "common sense" do not usually strike an economist very favourably. He is apt to associate them in his mind with the silly persons who say they "don't believe in economics, but prefer to go by common sense," and then proceed to put forward some monstrous fallacy. Mr. Wicksteed appears to have adopted his rather unfortunate title because he believes, quite rightly, that we must "take our ordinary experiences as the starting point for approaching economic problems" (p. 3). No one, I think, will be found to deny that he has followed this maxim with great success. I certainly know of nothing in economic literature more charming than the passages in which he records what are evidently his own, perhaps unsuspected, observations of the policy of the mistress in his patriarchal home.

"A certain lady," we are told, "when she gave her children a jam-roll, used to begin helping the elder children liberally; after a time she would see that it would not go round on that scale, would draw up and economise in the middle, and then, finding she had made enough economics, would relax again for the younger children." (N.B.—The observation was made and the record preserved by one of the children that came towards the middle.)

This illustrates "the equilibrium of marginal values," aimed at alike by the merchant and the housewife, and its imperfect attainment by both. The fact that "the marginal significance at which a commodity is actually consumed depends upon the urgency and extent of the claims that have to be met and adjusted and the quantity of it at command, and is not affected by the price that was actually given for it" receives, *inter alia*, the following illustration:—

"Through an ordinary miscalculation or through some unforeseen change of circumstances, such as the unexpected departure of

several members of the household, or the coming on of thundery weather that threatens to turn the milk, the supply for the next few hours may become so much larger than was expected relatively to the demands made upon it, that it will be consumed at a lower marginal significance than would have justified the purchase. The cat may have as much as she chooses to lap. A member of the household, coming in hot from a walk in the sultry air, and expressing a timid desire for a glass of milk, may be treated almost as a benefactor instead of being treated as a criminal, as he was when he last made the same suggestion under less propitious circumstances."

The author's penetrating insight into the motives of our everyday actions enables him to show that various proceedings which the rich advise the poor to abstain from are really quite "economical" for those who practise them. It is better to get a cheap though bad pair of boots than either to go barefoot or to starve for a week in order to buy a good pair and then go to the cemetery instead of the bootmaker's. Even the hire-purchase system has merits.

All is not, however, for the best in this best of all possible worlds. Speaking of "economic forces," the author asks us (p. 192) "no more to take it as axiomatic that they will work for social good, if left alone, than we should take it for granted that lightning will invariably strike things that are 'better felled.'" Is not this idea of economic forces "left alone" a product of eighteenth century beliefs about Nature which are now quite exploded? We can see now that the beneficence which Adam Smith claimed for the workings of self-interest is the result of the existence of certain institutions, such as property and the criminal law, which direct the flow of self-interested activity into beneficent channels. When eighteenth and early nineteenth century thinkers demanded *laissez faire*, they took these institutions, with the exception of certain details of which they disapproved, to be "natural," so that self-interest, working within the limits imposed by the institutions, could be regarded as "left alone." In these days, when anthropology has superseded *histoire raisonnée*, and we no longer imagine the institutions of our own time, with some small emendations, to be "natural" and all others "artificial," protests against the policy of leaving economic forces alone are out of date, since that policy must be seen to be absolutely chimerical rather than simply erroneous. If any semi-somnolent individual still asks for *laissez faire* he can be sufficiently dealt with by an inquiry into what he supposes himself to mean by it.

Blemishes like this are few and of little account, and he would be a difficult reader to please who could not read the first few hundred pages of the work by the fireside in winter, or under the trees on a cliff in summer, without being in the least inclined to echo the complant of Callicles, modestly affixed to Book I. as a motto, that Socrates would keep on drivelling away about food and drink and doctors and sandals. It would, I think, have been better if the work had been published as two separate books. Seven hundred pages require a voracious appetite, and the homely exposition of Book I. will not appeal to quite the same circle of readers as Book II. Moreover, the plan of mentioning no names, which is adopted throughout, while suitable enough in Book I., is not really convenient in Book II., which largely consists of sharp criticism of current doctrine. It is always better to criticise by name, so that the student may know exactly where to look in order to assure himself that the account given by the critic of the doctrine criticised is correct, and in order that he may know whence to expect a reply if one is needed. I suspect that most of the writers criticised will refuse to recognise themselves in the Aunt Sallies set up to be knocked over. A good deal of Book II. consists of an exposition of weaknesses in the current diagrammatic method which the diagrammatists will say they were fully aware of. The vigorous attack on the theory of rent is spoilt by a want of attention to the origin and history of the theory; the theory itself and criticism of it are alike unintelligible if it is treated as if it was invented at the end of the nineteenth century instead of in a closed island at the beginning of that century, long before "graphic representation" was ever thought of.

Perhaps the most unsatisfactory part of Book II. is the treatment of currency. I certainly have no objection to the view put forward that the extent to which variations in the supply of gold alter its value depends on the elasticity of the demand for gold in the arts: when I have to deal with the subject, I always say so. Nor do I think that if the sovereign would only buy what is now half-a-sovereign's worth of goods, the currency would be doubled: at present my average holding of gold is about £5, and with the rise of prices supposed, it might increase to £6 or £7, certainly not to £10, since I should prefer to go oftener to the bank for cash than I do now rather than to carry double the amount of gold about. But I do not believe anyone of importance, if anyone at all, holds the grotesque quantity theory set up by Mr. Wicksteed on page 610 in order to be demolished, and which, we are told, "a treatise on currency frequently expounds." We should have to

go back to Hume to get anything closely resembling it. Surely all that is meant by the quantity theory is that the value of units of currency is affected, like that of units of any other commodity, by changes in their number. I am not sure that Mr. Wicksteed admits even this, since he says:—

“It is a matter of convenience how much of the business of a country shall be carried on by the aid of a circulating medium and how much without it; and, as a matter of fact, at periods when there is a dearth of small change in a country a great amount of retail business is conducted on account, and balances are more often settled in kind. Thus business which would ordinarily have been carried on by the circulating medium is carried on without it, because of its rarity. In Italy, for instance, when coppers were rare, the exchange value of a copper did not rise because a smaller number had to do a greater amount of work, but each unit did as much business as it could and the rest was done without them.”

I am not familiar with this Italian example and cannot deal with it. But why go to Italy? Is it not almost common knowledge that the value of English shillings and pennies is kept up to 20 and 240 per pound sterling simply because the Mint is a monopolist which will not reduce its price below those figures? Nobody doubts that a great decrease in the demand for currency such as might be caused by half the people of the United Kingdom being carried off by influenza, would cause this token coinage to go to a discount, unless, of course, the Government shouldered the burden by making the coins redeemable at their present value. It is certainly a little more difficult to realise the converse case of a rise in value, say of the shilling to one-tenth and the penny to a hundredth and a twentieth of a pound, but this is only because anticipation of the future would be brought more obviously into account. If half the shillings and pennies and other silver and bronze coins disappeared by accident, people would expect the Mint to be soon successful in replacing them, and so nobody would care to accept either at more than their old value. But if the Government in consequence of the accident decreed that henceforth florins were to be taken at five to the pound, shillings at 10, sixpences at 20, pennies at 120, halfpennies at 240, and farthings at 480, and were to forthwith arrange for the coinage of additional farthings and a new coinage of half-farthings, and probably also for a considerable readjustment between the other coins, the existing holders of the existing stock of silver and bronze would benefit, and the public generally would have a subsidiary coinage very much more convenient than the present,

provided that the danger of illicit coining could be provided against as effectually as now. As for standard coins, surely the history of the Indian rupee ought to satisfy anyone that it is possible to raise value by restriction of quantity apart from any suggestion of redemption such as Mr. Wicksteed seems to think essential. There is nothing anomalous in the value rising and falling with decreases and increases of quantity.

A minor point on which the author seems to me to have fallen into error is in supposing that a jeweller who melts sovereigns to make a watch-chain or set a stone in a brooch in a normal state of the market will incur a cost of $1\frac{1}{2}$ d. "for melting" over and above what he would have to pay if he used uncoined gold. Why? He has to melt in either case, and if his productions are below the standard of fineness adopted for the coinage, is not the presence of the alloy in the coin an advantage rather than a disadvantage to him?

In Book III., which is much shorter than the others, we find ourselves back again in the atmosphere of Book I. Various practical questions are discussed with real "common sense," aided by familiarity with economic reasoning. The exposition of the inadequacy of the "national income" as a measure of the possibilities of material welfare is especially admirable. The chief complaint which may be made against the book is one which may be made against nearly all discussion of the economic future of society—there is no adequate recognition of the importance of inherited property. We are told that "the central thesis" of the whole work "is that so far as the economic forces work without friction, they secure to everyone the equivalent of his industrial significance at the point of the industrial organism at which he is placed" (page 698). Is it "friction" that causes some persons to inherit ten millions and most nothing at all? Or is a person's "industrial significance" to be measured by the quantity of property he has inherited as well as by his actions? Neither of these interpretations seems possible, and if the terms are used in their ordinary sense, the proposition appears palpably absurd when we try to form some estimate of the ratio between property which has been earned by its owners and property which has been inherited, and remember that the ratio must in all probability become smaller and smaller as the world grows older. But the error is the inevitable outcome of the current doctrine that "the problem of distribution is a problem of value" (instead of a problem involving quantity as well as value of labour and property). I fear that in regard to this important matter Mr.

Wicksteed will be classed by the future historian of economic theory along with the writers whom he most roundly condemns.

EDWIN CANNAN,

The Sun's Heat and Trade Activity. By Professor H. STANLEY JEVONS. (London: King and Son. 1910. Pp. 35.)

THIS is a reprint, with the addition of a preface and summary, of an article which appeared in the *Contemporary Review* for August, 1909. It is a most important piece of work. Time and research have brought to light new features of the problem of the trade cycle which were non-existent or unobserved when Professor W. S. Jevons wrote. His son now draws our attention to these two facts, that the intervals between successive periods of good trade approximate to some multiple of $3\frac{1}{2}$ years, and that, according to recent researches, the heat emitted by the sun, which varies as the sun-spots, changes in cycles of about eleven years, broken by less pronounced cycles of $3\frac{1}{2}$ years. The actual connection between these cycles and trade oscillations Professor Jevons puts as follows when summarising his argument:—"When the dependence of industry on the harvests is admitted, the question arises how it is that industry as a whole does not vary in a period of $3\frac{1}{2}$ years; for it is well known that periods of exceptional trade activity, followed by a collapse and depression, recur all the world over after intervals lasting either seven or ten years. The most probable explanation is that industry, owing partly to its methods, and partly to the mental characteristics of its business men, is unable to fluctuate in a period less than seven years in length. It may be that its normal period of oscillation—that which would suit existing conditions best—is from eight to nine years in length. But the impulse from the harvests comes every $3\frac{1}{2}$ years, so that trade fluctuations must fit in to the nearest multiples of $3\frac{1}{2}$ years. . . . Industry being unable, for economic reasons, to fluctuate in a period of $3\frac{1}{2}$ years, the trade cycle probably adjusts itself to the comparative plenty or dearth of successive periods. If exceeding plenty does not return until the third $3\frac{1}{2}$ -year period, it is natural that the next boom, and consequent collapse, must be deferred until ten years after the last one."

Taking the wheat yield of the United States from 1870 to 1902, Professor Jevons proves that it varies in an average period of 11.2 years, which is remarkably close to the average length of the sun-spot period, i.e., 11.125 years. This was the best result

obtained, but others relating to different kinds of natural products were deduced in support of it. Finally, in this part of his researches, Professor Jevons constructed index numbers of the total agricultural produce of the United States. The index numbers revealed short period oscillations of 3·7 years. Now the long solar period, which includes three short periods, is 11·125 years, and one-third of this is 3·71. When the index numbers of American agricultural produce were correlated with the April to October pressure averages of the barometer at Cordoba, which reflect the solar period, a co-efficient of $\cdot 437$, and a probable error of $\cdot 101$, were obtained. As the correlation co-efficient is as much as four times the probable error, we may take it that dependence is established. It might be, of course, that bad harvests in one part of the world are compensated by good harvests in other parts, but Professor Jevons brings forward evidence to show that there is synchronism between the good harvests of some distant places—he instances the English Eastern Counties and the United States—and that such compensation as there may be does not wipe out cyclical variations. It is shown that in the statistics of world natural products which exist, cyclical movements are generally noticeable if not pronounced. The same cause might, of course, produce a bad harvest in one climate and a good one in another; but whether and in what degree the fluctuations of natural products in different parts of the world are compensatory, it yet remains to investigate thoroughly.

Professor Jevons' second task was to discover what, if any, connections subsisted between harvests and the state of trade. He takes a number of indices of the state of trade, for instance, pig-iron production, railway receipts, returns of banks, and foreign trade, and traces some degree of correspondence between their rhythmical movements and those of agricultural produce, though no correlative co-efficients or average periods are worked out. Deductively, it is argued as follows:—"In reality the loss of capital caused in any one year by natural calamities, and even by great wars, is small in comparison with the fluctuations of Nature's bounty. The harvests of grain in 1892 were less than those in 1891 by approximately one thousand million bushels. If we reckon the average value of such produce at 2s. a bushel, that means that the world was poorer by £100,000,000 worth of goods in 1892 than it was in 1891. The grain crops of 1902 exceeded those of 1901 by 2,500 million bushels, or £250,000,000 worth. These figures would undoubtedly be considerably increased if we took into account cotton, wool, rice, beef, mutton,

rubber, dairy produce, tea, coffee, peas, beans, potatoes, fruit, and a multitude of other agricultural products."

In my opinion, after these fresh investigations, the connection between the solar periods and the state of trade can no longer be doubted, though the degree of this connection remains to be estimated, and it has not been proved that the purely psychological, or economic, explanation is not also partially true. Indeed, in the first passage quoted above, and in other places, Professor Jevons leaves an opening for its introduction.

S. J. CHAPMAN

Land and Labour: Lessons from Belgium. By B. SEEBOHM ROWNTREE. (London: Macmillan and Co., 1910. 8vo. Pp. xx. + 633. Price 10s. 6d. net.)

MR. ROWNTREE has followed up the deserved success of his previous study of poverty in York with the larger inquiry, conceived in the same comprehensive spirit and executed with the same intelligent pains as that applied before to a single town, which is presented in the present volume dealing with the economic condition of the inhabitants of Belgium. At different stages of the investigation we are reminded, often by direct comparison of the statistical results obtained, of the earlier book; and, in spite of the criticism aroused by Mr. Rowntree's former conclusions respecting the inadequacy of the incomes of certain sections of the population of the English cathedral city to meet an expenditure dictated by the bare necessities of physical efficiency, he pursues a similar course of reasoning in the chapters in the fifth part of his new work, where he handles the general standard of comfort of the Belgians and the cost of living. He sees, it is evident, no cause for employing a dissimilar test.

As far as the town workers are concerned, it may be noted, that, while in England no budgets were obtained for a class whose earnings are as small as those of the lowest class for which such information of income and expenditure has been secured in Belgium, in the class above, where comparison is possible, the Belgian is better fed than the English family, because a larger percentage of the receipts is expended on food in the Continental country. In the lowest class of all, indeed, in Belgium, the choice by the people of nutritive food stuffs seems to establish their superiority in this respect, at least, over the class in York, whose earnings are comparable, not with this lowest class, but with the class above.

But it is not only in this particular feature of his inquiry, but also in the general characteristics of the methods of collecting and digesting the material obtained, that Mr. Rowntree has adhered to the high tradition set by his previous monograph. He has used with discriminating care all the official information which he could procure; but he has added to this, as occasion has required, independent investigation instituted by himself) and conducted largely through his own responsible agents and assistants, into special points of interest, where authoritative statistics were defective or non-existent. Such, for instance, were the inquiries made into the number of landowners and the size of their holdings, into the extent of the mortgage-debts of the peasant proprietors, into the wages paid in the principal industries, into the selling-price and rent of land throughout the country, into the incidence of local rates, and into the conditions of housing, both urban and rural; and all these diligent and elaborate scrutinies were undertaken in addition to that collection and examination of some seventy family budgets to which we have already alluded. The result of the four years of study, thus occupied, is an elaborate account full of interesting detail, and suggestive of certain general conclusions, which no English economist can henceforth neglect, who desires to know the conditions of Belgium or to compare that country with his own.

For, as Mr. Rowntree states in his Preface, his hope has been, and is, to contribute to the solution of the problem of poverty in Great Britain by throwing some light on its relation to the system of land tenure. For that reason he is more concerned with the agricultural than with the industrial life of the Belgian people. Part I. of his book is devoted to the consideration of "some fundamental factors in the social and economic condition" of the country; and here the history of land tenure, the number of landowners classified according to the size of their holdings, and the laws of succession and inheritance, and the methods of land transfer, occupy three chapters of the five contained in the section; while in the remaining two a description is supplied of the geographical and physical characteristics of the country, and of its history and constitution. After some forty pages occupied in the succeeding part with "industrial" life, we return in Part III. to "agricultural" life; and of this a very complete examination is attempted. In Part IV. "some factors influencing agricultural and industrial prosperity," such as (i.) education, which in the author's opinion suffers severely from being made a party question, and, in the case of primary education at least, has not

passed beyond a low standard, or as (ii.) the means of transport, on the cheapness and abundance of which Mr. Rowntree has little but appreciative admiration to bestow, or as (iii.) the system of taxation, which does not meet with such unqualified approval at his hands, are considered. Part V. is concerned with a survey of the "standard of life," beginning with the family budgets we have mentioned and passing on to such topics as co-operation, the drink problem, betting and gambling, housing, thrift, pauperism, unemployment, and vital statistics; in Part VI. certain general "conclusions" are set forth; and numerous Appendices contain an abundance of Tables dealing with various topics treated in the main body of the text.

From this summary it will be seen what industry has been judiciously bestowed upon the preparation of this valuable and bulky work; and it will also be noticed that the space assigned to agriculture is predominantly large. It would be impossible within the limits of this review to do much more than instigate our readers to consult Mr. Rowntree's pages for themselves, where they will find a veritable storehouse of accurate and instructive information; and we may add that the concise repetition of the chief results obtained, which is conveniently given at the end of each chapter, facilitates the grasp, and aids the recollection, of the main conclusions reached. We do not think, however, that we should misrepresent the general purport of Mr. Rowntree's own belief if we said briefly that, while he holds that Belgium has something to learn of England in the improvement of industrial life, Belgian agricultural conditions afford some instructive lessons which may be studied with advantage by Englishmen. In some respects the example set might, he thinks, be profitably imitated.

Industrial life in Belgium is, as he puts it, "at a low potential." Wages are "very low"—being in the building and engineering trades about one-half of those paid in England; and this lowness is due, apparently, to the small productivity of the workmen, and to the inconsiderable proportion of their number engaged on the manufacture of goods of the highest quality; but it is still more largely due to the weakness of trade unions. In this last respect, here as elsewhere (as, for instance, in the matter of Co-operation), the bitterness of the Belgian political parties results in ineffectual action. Catholics, Liberals, and Socialists, must, it would seem, have their separate societies and organisations, and they will not combine for common action. The consumption of alcohol, moreover, is large, while poor relief is badly organised. But, on the

other hand, the burden of taxation is not heavy, if it is mal-adjusted; and there is probably less unemployment in Belgium than there is in Britain. House-rent is not high, partly because the cost of building is low, and partly also because the excellent and abundant means of cheap transport render it possible for the population to be "more diffused." Workmen engaged in the towns can thus practically live in the country; and there is a good system by which capital for providing housing accommodation for the poor is easily forthcoming in sufficient quantity.

The system of transport, in which light railways fill a prominent rôle, while the canals are not neglected, contributes also to the undoubted success of Belgian agriculturists; and the State, which owns most of the railways, plays no less beneficent a part in afforestation, which affords opportune employment in the winter when other work becomes slack, and also in the active help it gives towards extending the knowledge of agricultural improvements. The light-railway system receives Mr. Rowntree's especial commendation. For, in spite of a soil naturally poor, which needs constant manuring, the yield obtained per acre from the cultivated area is higher in Belgium than it is in any other country of Europe. To an aptitude for agriculture is joined the necessity for intensive cultivation imposed by the subdivision of the soil. That subdivision is promoted by the French law of succession and by the density of population; and, in consequence, the price and rent of agricultural land in Belgium are about twice as high as they are in England. One in every ten of the population owns a plot of land, while the average size of a farm is 14½ acres, compared with the average of 63 acres in Great Britain; and 63 per cent. of the agricultural population consists of farmers and members of their families working with them, and only 35 per cent. of labourers, while in Great Britain the figures are reversed. Yet the small holder, Mr. Rowntree admits, "lives roughly," and "except in winter, works unreasonably long hours for low pay," while the peasant proprietors' mode of life is very similar to that of the tenant. "Both have to live sparsely and work extremely hard to make a living."

And hence, while our author thinks that Belgian experience shows that we could establish a great number of small holders upon the soil of England, who would succeed, if, as in Belgium, adequate means of cheap and rapid transit were provided, co-operative methods of purchase and sale were encouraged, and agricultural education systematically diffused, he nevertheless does not believe that all is for the best in Belgium. He considers

that she has failed hitherto to devise a proper means of intercepting, for the benefit of the community, the increase which has taken place most markedly in land values in that country. The controversial question of the taxation of "unearned increments" derived from landed ownership seems to us, we must confess, to be dragged into the quiet course of this disinterested narrative, rather after the fashion of King Charles's head in Dickens's well-known story; and neither in the case of urban nor of rural land is it by any means certain that all the beneficent consequences which Mr. Rowntree manifestly expects to flow from this single expedient will be realised in fact. But such is the final moral he would enforce. There are also some other occasions where he allows his political predilections to obtrude themselves with unnecessary prominence; but those of his readers who do not agree with the particular solution of such debated questions which he favours, will nevertheless be grateful for the scrupulous care and the unwearying pains he has freely lavished on the conception and the execution of this *magnum opus*. He has, in truth, conquered in this venture a new area for statistical research; and for the strategy and tactics alike which he has employed in his scientific work we entertain a sincere, respectful admiration.

L. L. PRICE

FOUR COBDEN CLUB PAMPHLETS.

- Political Economy and Fiscal Policy.* By Professor BRENTANO.
The Fiscal Policy of International Trade: Summary of Marshall's Memorandum. By J. M. ROBERTSON, M.P.
The Empire Aspect of Preference. By Senator PULSFORD, of Australia.
The Revolt of the Protectionists in Germany against their own Tariff. By ANONYMOUS.
 (London: Cassell. 1908-9.)

PROFESSOR BRENTANO draws a parallel between the present position of the German Empire and the state of our own finances on the eve of the reforms of Peel and Gladstone. Whilst England under Free Trade pays off debt, Germany under Protection contracts it. In Germany now, as in England before 1840, the community is taxed very heavily for the benefit of organised minorities, whilst the State itself goes empty away. As a broad view of the position of the two countries and their fiscal histories,

Professor Brentano's picture may stand. When we go into details the result is less satisfactory. There is something revolting in the spectacle when a writer whose academic eminence is admitted adopts the controversial methods of workaday journalism. Professor Brentano is constantly careless of the niceties of economic reasoning, he frequently neglects the canons of ordinary logic, and occasionally displays an ungenerous temper. As regards economic niceties, we find him instancing the rapid growth of taxable income in England after 1853 without inquiring how far this was due to the depreciation of gold—needless to remark also without mentioning the high wheat prices which prevailed at the same period. We find him, again, stating as "an uncontested fact" "that the inland price of corn exceeds that of the corn price in the world market by exactly the amount of the import duty," and implying that this is irrefragable evidence of the burden thrown by Protection on German consumers both of wheat and of rye. Again, much of his general reasoning is open to criticism. "But was the new Protectionist policy at least the cause of an extraordinary economic progress of the German people? If so, such an effect of Protection would have manifested itself immediately upon the return to that system." A gross *non sequitur*! Nor does it stand alone. His defects of temper are shown in passages where he suggests that the Protectionist movement in England is due partly to the desire of the upper classes to provide for their sons in the Empire, the Army and the Navy, at the expense of the working classes (how this would be done is not explained), and partly to the evil designs of London business men who condemn Free Trade "for the very reason that it renders such abuses impossible as have been the cause of the attacks on Protection in Germany and in America."

The summary of Dr. Marshall's "Memorandum on International Trade" calls for little remark, since most economists are familiar with the original. It is worth while noticing, however, that it illustrates admirably the importance of scientists giving their best even when they write hastily or for popular consumption. Brentano's paper will hardly touch the mind of any reader, unless perhaps to make him suspicious of the cause which it advocates. Men who forgive the bias of a journalist or a politician are offended by the bias of a professed servant of truth. It is precisely here that Dr. Marshall's superiority is manifested. Readers may not be convinced by every opinion which he expresses, but they will not suspect him of prejudice, and will, there-

fore, listen more attentively to what he has to say. From this point of view we regret that the editor has introduced notes intended apparently to dot the Free Trade "I's" of the Memorandum whilst erasing the crosses of its Protectionist "T's."

Senator Pulsford, of Australia, has said something new about the fiscal problem. Casting about for evidence as to the probable outcome of tariff negotiation between the United Kingdom and the Colonies, he hit upon the idea of studying the history of inter-Colonial tariff agreements. Free Traders have constantly asserted on *a priori* grounds that great difficulties would be encountered if ever the Preferentialists got to business, but so far as we are aware no one hitherto has illustrated those difficulties in this way. I shall not attempt to summarise the argument. The senator most certainly should be read by men of all parties. It may be as well to warn the reader not to be put off by the opening sentence: "Will the Preference sprat catch the British whale?" It is almost the only *cliché* in a vigorously written paper.

"The Revolt of the Protectionists in Germany" is anonymous. The writer gives a straightforward and well documented account of the present position of the iron and steel industry in that country, and of the causes which led fifty-six firms to petition the Reichstag in 1909 for relief from Protection. The position in few words is that firms which do not themselves manufacture steel and the cruder steel products are at the mercy of the syndicates. Their foreign market is confined or cut away, whilst mixed works compete fiercely with them at home. The chief criticism which occurs is the old doubt whether we are justified in attributing to Protection all the evils of trusts. As Dr. Lévy has well shown, there are other reasons beside the absence of Protection for the comparatively innocuous character of the combination movement in England. But combination is growing over here, and is likely to grow. And if English industry generally were to change from organisation by independent firms to organisation by cartells, we should find a number of firms left out in the process, and complaining that they could do no trade in a Free Trade country.

H. O. MEREDITH

L'Impôt sur le revenu. Par JUST HARISTOY. (Paris: Alcan, 1910. Pp. 881.)

DISSATISFACTION with the direct taxation of France has expressed itself for many years in attempts to introduce a general

income tax in place of the four taxes on land, trades, securities, doors and windows. These direct contributions do not strike all kinds of income equally; some professional incomes are exempt from the *patente*, mortgages and State funds escape, and there are many other gaps. Their yield is not so elastic as that of the English income tax, and they do not directly ascertain income but measure taxable capacity from such external signs as the number of doors and windows, the kind of business, the number of employees, and the population of the commune. Hence there is a lack of uniformity, while the differences of treatment do not correspond with any intelligible principles of progression or discrimination. Hitherto the proposal to adopt an income tax has not been successful, but last year the Bill of M. Caillaux passed through the Chamber of Deputies by a large majority and brought the matter to a head. An influential "League against the Income Tax and Fiscal Inquisition" was organised in Paris, and at its request M. Haristoy undertook to publish a volume against the projected taxation. It was almost inevitable that in such a work the arguments on both sides would not always be examined with judicial impartiality, yet there is an honesty of purpose and a recognition of the need for reform which go far towards placing it above the ordinary level of such polemical literature. There can be only one opinion as to the diligence and ability of M. Haristoy, though many will question the value of his conclusions.

The keynotes of the work are sounded at the outset. The income tax project is out of harmony with the spirit of the Revolution which suppressed the vexatious *impôts personnels* and substituted *impôts réels*. To abandon the existing system of taxation according to external signs in exchange for one requiring personal declarations of income and official inquisition, would be to meddle with a sacred heritage, and to recall the strife, oppression and arbitrariness of the *Ancien Régime*. If there are gaps in the present system, they could be remedied without overturning the splendid work of the Constituent Assembly.

The author is a determined opponent of "personal" taxation if that ambiguous term involves direct inquiry into incomes, though in defending the French system against the charge of ignoring the circumstances of the taxpayer he insists that "real" taxation is not inconsistent with exemption of small properties and poor people, or even with deductions for family charges and differential treatment of incomes. After an interesting study, in Part II., of the merits and defects of the four direct contributions which it is proposed to suppress, the conclusion is reached that,

despite imperfections and inequalities, the present system is on the whole an excellent one, possessing the great merits of involving the minimum of friction between the Treasury and the citizen, avoiding inquisition, and being very productive.

Part I. is devoted to showing that income taxes give rise to serious abuses even in countries which have had a long apprenticeship to them. Budgetary necessities created and maintained the tax in England despite its unpopularity. The Prussian legislation was only accepted because it replaced more barbarous methods. In neither country is the rate so high as is proposed for France, and there are constitutional checks upon abuse of the system—M. Haristoy mentions the House of Lords—which would be absent in that country. Usage counts for much, and the Germans are accustomed to submit to administrative authority. Yet even in Prussia and England, not to speak of Italy, frauds are common, while the distribution of the burden gives rise to grave inequalities. The value and power of a tax, as well as the possibility of its application, depend upon the character and temperament of the citizens and upon the fiscal and political condition of the particular country, and the circumstances of France are in every respect unfavourable to an attempt to acclimatise such a tax.

Part III., which occupies over two-thirds of the volume, analyses the different schedules of the proposed tax and super-tax (*impôt complémentaire*). Many objections are raised to details, but the burden of the author's complaint in every section is that the machinery involves formidable inquisition, menaces property, and must greatly disturb industry and commerce. The real purpose of the measure, in his view, is to ascertain income for Socialistic ends, and if adopted it must lead to higher progression and a class war.

Since the publication of this volume and the recent General Election, the new Finance Minister has declared his intention of bringing forward a scheme similar to that of M. Caillaux, with precautions against the "inquisitorial and vexatious" methods to which so much objection has been taken; but though the project may be improved it certainly cannot be made to satisfy M. Haristoy without abandoning every distinctive feature of an income tax. His main argument is directed against "personal" taxation, and no income tax could be so free from inquisitorial methods as to meet his demands. The principle of taxation according to external signs, the elimination of all declaration by the tax-payer, are to him the essential features of a good system;

and if these are granted he is apparently willing to consider favourably the suggestion to render taxation more equitable by adding new indices of contributive capacity. Thus a proposed alternative to the *impôt complémentaire* which would estimate ability to contribute by such signs as wages paid to servants, expenditure on horses, carriages and motors, receives his approval. "This system, which is in harmony with those of the Constituent Assembly, might be considered as leading automatically, without any inquisition, to reasonable and productive taxation." But it is difficult to understand M. Haristoy when he deals with the equitable distribution of taxation. He condemns the idea of progression, not merely because it involves risk of spoliation and arbitrariness, but as arising from the capital error of making taxation "personal" instead of "real." In another place he asserts that a super-tax to counterbalance the burden of indirect taxation on the poorer classes is quite unnecessary, because the poor do not bear more than their share. Yet he views with favour a proposal for higher taxation of the rich provided it is "real." The one thing he cannot contemplate is a direct inquiry into incomes.

STANLEY H. TURNER

The Social Contract: More Particularly in Relation to Taxation.

By C. Y. C. DAWBARN. (London: Longmans, 1910. Pp. 152.)

LAST year Mr. Dawbarn published a larger volume, *Liberty and Progress*, when the principles of taxation "seemed to be so well and generally accepted" that he mentioned them only in a few stray notes. Subsequent events have convinced him "that old principles should be restated and old teaching reinforced," and for this purpose he tells us that he uses as his tools "the conclusions of political economy." This leads up, by way of the social contract and "a pitiless working out of the principles of individualism," to the very old teaching that ~~taxation~~ taxation should be levied on the basis of payment for services received. Mr. Dawbarn does not appear to realise that the conclusions of political economy may here be in conflict with his own, and he shows no acquaintance with the criticisms which have been brought against this doctrine. However, it is interesting to find that he does not range himself with the majority of the upholders of the theory by deducing proportional taxation from it. Since life and security are of supreme importance to all, "a contribution in the nature of a poll tax may well be demanded"; but before the end of the

volume this is translated into a 5 per cent. duty on imports, including food and raw materials without any exception whatsoever. The incidental benefits of this project would be that the Free Trader and Tariff Reformer would meet half-way, and that it "might settle our Irish difficulty," since the preference of 5 per cent. would "compensate them for not having Home Rule." But this alluring poll tax only pays for certain services, and no considerable amount of contribution can practically or theoretically be expected from it. Services rendered include more than personal safety. "Surely those who take the most [of the national dividend] most profit by the co-operation of their fellows, and probably benefit at a progressive rate"; and so we are led to progressive taxation as the logical outcome of the principle of "services received." The author here almost succeeds in effecting a reconciliation between the faculty and benefit theories, as well as between Free Trade and Protection, Unionism and Home Rule. In the application of his doctrine there are many details almost as interesting as his poll tax, but on the whole the book contributes nothing of importance to theory or practice.

STANLEY H. TURNER

The Trading Enterprises of Manchester. By DOUGLAS KNOOP.
(In *Die Gemeindebetriebe in Frankreich und England.*
Leipzig: Duncker and Humblot, 1910. Pp. 78.)

MR. KNOOP's clear and concise article is one of a long series, dealing mainly with German towns, published by the *Verein für Socialpolitik*, and deserves not only to be widely read but to serve as a model for similar accounts of the activities of other British towns. Without disparaging the books of sturdy advocates and severe critics of municipal trading, we certainly need more careful analysis, impartial description, and elucidation of the many important problems of price, profits, debt-management, wage policy, and the like, which arise in the operation of these enterprises. Mr. Knoop does not trouble himself about the desirability of municipal trading, nor does he even criticise the details of policy; he is content to explain the origin, growth, present position, price system, and financial results of each of the enterprises, and it is only when this has been done for a large number of cities that we shall be able to realise the wide differences of practice from place to place. As this is apparently the only article in the series which treats of the United Kingdom, it

would have been useful to foreign readers if the author had explained that great variations exist among our towns; that while Manchester charges a higher price for gas outside the city boundary than within it, Glasgow is forbidden to do so; that while Manchester applies large sums from the profits of the gas-works in relief of rates, Glasgow must devote the profits exclusively to the undertaking itself. Many other differences of equal moment could be drawn between these two cities alone. But Mr. Knoop's article amply fulfils the promise of his English title even though it is scarcely adequate to the German one. It is an excellent and orderly statement of the facts from which the reader is free to draw his own conclusions.

After dealing with the enterprises *seriatim*, sections are devoted to general remarks upon financial results, selling policy, the contrast between municipal and private trading, and the attitude of the civic authorities to the question of trading. In only one case—tramways—is the transference from private to municipal management sufficiently recent to permit of any contrast, and it is shown that more rapid and cheaper facilities have been provided, that the position of employees has been greatly improved, that the contributions in aid of rates have been much higher than when the tracks were leased to a private company, while a substantial depreciation fund has been accumulated in addition to the sinking fund. To what extent the facilities might have been improved and cheapened, or the rent paid by the company raised, if the policy of municipalisation had not been adopted it is, of course, impossible to say; but Mr. Knoop, perhaps unintentionally, conveys the impression that all the improvement is attributable to the change from private to municipal operation.

The selling policy of the enterprises is admirably described, and we wish that considerations of space had not prevented its expansion. It would have been interesting to learn, for instance, the reasons for differential charges within and without the boundaries. The problem of halfpenny fares, which has recently been much discussed in a number of cities, is carefully considered. They exist on a few routes in Manchester, but "statistical inquiries show that 35 per cent. of the penny passengers travel only a mile or less, and it is estimated that the adoption of one mile halfpenny stages would have the effect of transferring 50 per cent. of the penny passengers to the halfpenny class, and would result in a reduction in revenue of £107,020 per annum. To make up for this loss of revenue, fifty-one millions of additional halfpenny passengers would have to be carried per annum, which

alone would necessitate a large increase in the number of cars, and consequently increased working expenses and fixed charges, for the same revenue." The Tramways Committee consider that even half-mile halfpenny stages on the main routes would cause loss of revenue. The experience of other towns lends considerable support to this view, but where the tramways are yielding a high profit the question may be raised whether it is better to apply a given sum to relief of rates or to reduction of fares and improved facilities. It is not very easy to give a positive answer, yet circumstances are conceivable where even halfpenny stages which absorbed some of the profit would be more socially beneficial than a slight relief of rates. The consumers' surplus would be very large if these statistics are trustworthy.

STANLEY H. TURNER

Housing Reform: A Handbook for Practical Use in American Cities. By LAWRENCE VEILLER. (Russell Sage Foundation: New York Charities Publication Committee, 1910.) Price \$1.25.

MR. VEILLER, who was Secretary of the Tenement House Committee of the New York Charity Organization Society, Secretary of the Tenement House Committee of 1900, and first Deputy-Commissioner of the New York Tenement House Department created to carry out the recommendations of that Committee, speaks with peculiar authority upon the housing question in American cities, and his book is a welcome addition to the publications of the Russell Sage Foundation.

To English readers it is particularly interesting, both because of the likeness and the unlikeness of the American problem to that with which reformers are struggling in English towns. Here, as in American cities, we have not only to clear away and improve the bad conditions which are the legacy of past ignorance and neglect, but the far more important, if less obvious, task of preventing such conditions from coming into existence again. We have to work out the problem of urban housing; the type of building best suited to different kinds of towns and different grades of occupiers; the bye-laws and building regulations which will effectively prevent bad conditions and yet not hamper building enterprise; the methods of management by which those who are not socially educated enough to treat their dwellings properly may become worthy tenants of decent houses. On all these problems, and the many issues with which the housing reformer

is familiar, Mr. Veiller's work throws much light; he is suggestive, thoughtful, and always interesting.

Fortunately, perhaps, for us, we have no conditions quite like those of New York, which are, indeed, abnormal. "In no other city is the mass of the working population housed as it is in New York; in tall tenement houses, extending up into the air fifty or sixty feet, and stretching for miles in every direction as far as the eye can reach. In no other city are there the same appalling conditions with regard to lack of light and air in the homes of the poor. In no other city is there so great congestion and overcrowding. In no other city do the poor so suffer from excessive rents." In England, we may add, the type of working population is entirely different. New York has to house a mass of varied nationalities in many stages of civilisation. In parts of London, and in some of our great ports, we have the same conditions, but not on so large a scale. Moreover, the difficulty which pervades all American social work, that of purifying municipal politics, of passing and administering legislation under the auspices of a corrupt party machine, is not one which we have to face. Allowing for these variations, however, many of Mr. Veiller's sensible recommendations and suggestions for securing improved laws and their proper administration, will commend themselves to English workers. Some of them are already, and have long been, embodied in our housing law, others are yet only in the air. In some ways the American standard is in advance of ours; for instance, Mr. Veiller says of New York workmen's dwellings, that "in 86 per cent. of all the new houses erected private baths for each family have been provided without compulsion by the builders, of their own volition." Improved legislation and better administration alone will not solve the housing problem. We have still to educate the tenants and the landlords, and it is interesting to note that Miss Octavia Hill's work has spread to America, where "excellent results have been obtained in Philadelphia by the work of the Octavia Hill Association." Mr. Veiller ends his excellent little book, with "a chapter of Don't's," most of which should be laid to heart by housing reformers. "Don't attempt to legislate first and then investigate afterwards." "Don't complain of the enforcing authorities until you are familiar with their methods of administration." "Don't cease your efforts after you have passed a good law."

No doubt Mr. Veiller will correct an irritating confusion of sheets made by his binders when he produces a second impression of his book.

L. FISHER

Unternehmertum oder Gemeindebetriebe? By EMIL SCHIFF.
(Leipzig: Duncker und Humblot. 1910. Pp. iv. + 80.)

THE title of this book is somewhat deceptive, as it contains no complete discussion of the case for and against municipal trading; it is really a reply to Lord Avebury's book *On Municipal and National Trading*, which has recently been translated into German. Mr. Schiff is chiefly occupied with combating Lord Avebury's vigorous attacks on the municipalisation and the nationalisation of trading undertakings. He adopts a more or less intermediate position between that of the extreme Individualists and that of the extreme Socialists, but it is difficult to say exactly what his attitude is, as he never deals with the general principles concerning the proper limits of State management of industries. He contents himself with approving of what is being done in Germany at the present time, and mentions in particular municipal water, gas, electricity and tramways, and State railways, telegraphs and telephones. On the other hand, he holds that the manufacturing industries are best left to private management.

Mr. Schiff finds fault with some of Lord Avebury's statistics, but, unfortunately, his own are by no means beyond reproach. For example, Mr. Schiff points out quite rightly, that Lord Avebury is not justified in asserting that private management is preferable to municipal management merely because the price of gas charged by certain companies is less than the price of gas charged by certain municipalities, as no proper allowance is made for the differences in the price of coal and no allowance at all for differences in the cost of the land on which the works are erected for differences in the size of the supply areas, for differences in the meter rents charged, and most important of all, though Mr. Schiff does not mention this point, for differences in the prices which can be obtained for the by-products, which depend almost entirely upon local conditions. Having denounced Lord Avebury's English figures, Mr. Schiff proceeds to quote some German figures of exactly the same character, and to which all the same objections can be made, with a view to showing that certain municipal gas works are more efficient than certain private gas works! With the same object in view, he compares the prices charged in different towns for electric current for lighting and power purposes, without making any allowance for the great differences in local conditions (*e.g.*, cost of coal, size of

supply area, character of the demand for current), or for the various methods of charging for electric current.

Perhaps the most remarkable statistics in the book are those relating to the safety of railway travelling in Great Britain, Prussia and the United States. In what concerns this country, we are informed that 73 persons lost their lives in the Tay Bridge disaster, and that in 1889 80 persons were killed in one railway accident alone. In Prussia in 1903 of every ten million railway passengers only four were killed on the average. In the United States, during the administrative year 1906-7 (11,839 people were killed and 111,016 injured in railway accidents. It need hardly be said that, as these figures are absolutely incomparable, no one can gather anything from them about the comparative safety of railway travelling in Great Britain, Prussia and the United States.

Although some of Mr. Schiff's arguments are not very sound, most English readers, who hold moderate views about municipal trading, will consider that he has succeeded in answering Lord Avebury's arguments, although they may not be prepared to accept Mr. Schiff's views about the desirability of nationalising British and American railways, as he has hardly made sufficient allowance for the special conditions of those countries.

DOUGLAS KNOOP

Enterprise and the Productive Process. By FREDERICK B. HAWLEY. (New York and London : G. P. Putnam's Sons. 1907. Pp. xiv. + 467. Price, \$1.75.)

IN this book Mr. Hawley presents his views with regard to some of the fundamental terms and ideas of economics. In the first place, he wishes to narrow considerably the generally accepted scope of economics. Instead of such a definition as Dr. Marshall's that economics is the study of mankind in the ordinary business of life ; that it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well-being, he desires to substitute the definition that economics is the science of industrial income. He wishes to exclude the consideration of individual and social activities, as distinguished from economic activities, and therefore to omit, amongst other things, the whole of that branch of economics known as consumption, and to regard economics as the science concerned with the creation of exchange value.

Mr. Hawley's method of studying economics is almost purely deductive. Like members of the old school, he abstracts the economic motive from all other motives, and assumes that the expectation of a net gain is the determinant of every human action. Some of his views are very similar to those which were formerly held, but which have now generally been discarded as inaccurate and out of touch with the real facts of life. For example, he believes in a somewhat modified wages-fund theory; further, he conceives of all labour as constituting a single class, and of changes in the supply of labour as being dependent entirely upon changes in the population.

The best part of the book is that dealing with profits. The author emphasises the importance of the function of the *entrepreneur* or enterpriser, who assumes the responsibility and the risks necessarily associated with every business undertaking. The nature and essential character of this function is pointed out, and it is carefully differentiated from the functions of the other factors of production. In dealing with these, Mr. Hawley takes the point of view that enterprise is the predominant factor in production, and that land (or opportunity, as he prefers to call it in more general terms), labour and capital are merely subsidiary.

The author's object, he informs us, is to establish the underlying premises of economics in an authoritative and definite manner, so as to gain public confidence and to make practical applications of economics possible. In this we feel sure he must fail, for, quite apart from whether his views are right or wrong, his book is far too abstract ever to appeal to the general public.

DOUGLAS KNOOP

Die Bilanzen der privaten Unternehmen. By RICHARD PASSOW. (Leipzig: B. G. Teubner, 1910. Pp. xii. + 355.) Price 8.40 marks.

DR. PASSOW'S work lies very much on the border-line between business economics and accountancy. He is chiefly concerned with discussing two questions: firstly, to what extent balance sheets can give a true and complete picture of the financial position of an undertaking, and secondly, to what extent they actually do so. A good deal of space is devoted to discussing technical and legal points connected with the drawing up of balance sheets, and these will hardly appeal to economists. On the other hand, all economists who are interested in industrial finance will appreciate the careful way in which Professor Passow weighs the

various considerations which must be borne in mind in judging balance sheets, and in attempting to make deductions from them. The subjects of goodwill and depreciation receive special attention. The inadequacy of many balance sheets, which appear to be drawn up with a view to giving as little information as possible, is strongly emphasised. The first part of the book is devoted to the discussion of balance sheets in general, whilst in the second part especial attention is given to the balance sheets of particular undertakings, such as limited liability companies, banks, insurance companies and railways.

DOUGLAS KNOOP

The Vagrancy Problem. By WILLIAM HARBUTT DAWSON.
(London : P. S. King and Son.)

THE chief feature of Mr. Dawson's book, "The Vagrancy Problem," is that it places before the general reader in lucid form a compact statement of the extent of the problem, what has been done in other countries, and what might be done in this country. Mr. Dawson shows very clearly that the existence of an army of vagrants, such as we possess in Great Britain, is a menace in itself to any attempt to deal with other and more deserving aspects of the wider problem of unemployment. While this large army of inefficient is able to wander about at will it offers an insidious temptation to the temporarily weak and unfit of the more permanent industrial army.

Mr. Dawson places his finger upon one of the weak points of our present system when he treats of the general practice in casual ward administration, "every union follows its own devices in making the life of the tramp hard or easy . . . in the absence of a uniform policy, few unions take the question of vagrant regulations seriously." He realises, however, that the administrators of the poor laws are not wholly to blame for this state of things. It is the system that is at fault. He therefore pleads for an alteration of the system on the lines that have met with at least partial success on the Continent.

To justify this departure he advances the plea "that society is justified, in its own interests, in legislating the loafer out of existence, if legislation can be shown to be equal to the task." With the exception of the two chapters dealing with "The Problem Stated" and "The Urban Loafer," the remaining chapters are devoted to proving that legislation can at least minimise the chief evils.

Much of the information he adduces is the result of personal investigation into the conditions which prevail in continental establishments; while he takes full advantage of the mass of evidence accumulated by the Royal Commissions and the private inquirer upon the subject. Out of the various systems with which he deals in the book, Mr. Dawson favours the Belgian system in operation at Merxplas as the type of institution that could be set up in this country for the incorrigible idler, with beneficial results. The work done here is a combination of agriculture and manufacture, and the principle acted upon is detention for a lengthy period. After supplying the inmates with the necessaries of life, any surplus is disposed of to governmental establishments, so as to compete as little as possible with the independent worker.

It has been proved so far that the "work-shy" can work, and work fairly well, when he is compelled, and at work requiring some considerable skill and ingenuity. By placing this collection of facts before the public in a convenient and readable form, Mr. Dawson has advanced the problem one more step towards solution. The academic stage has long since been reached. The "man-in-the-street" now needs convincing.

E. DILLON CLARKE

Where Shall She Live? By MARY HIGGS and EDWARD E. HAYWARD, M.A. (P. S. King and Son. Pp. v+216.)

THIS is a sympathetic account of the difficulty felt by the poorest women in finding decent lodgings at the price they can afford to pay. The sub-title—"The Homelessness of the Woman Worker"—is perhaps misleading, for Mrs. Higgs in her part of the book includes a good deal of description which applies to women who cannot fairly be described as workers. The question is a difficult one, as the problem is confused by including the class which takes refuge in common lodging-houses and casual wards. So far as these are concerned, we entirely concur with the demand for better regulation of the lodging-houses and the closing of the casual ward to women, who should be dealt with on other lines by the Poor Law authorities. But what the worker requires is a higher wage, which will enable her to pay a commercial rent, and it may be questioned whether the provision of subsidised Homes will promote this end. The ideal would be that such Homes should become temporary asylums, whence the women should be drafted to the better paid work which would

enable them to make for themselves a real home. That an asylum is often greatly needed, especially for young girls, is shown by some of the typical cases quoted in Appendix IV., and the "National Association for Women's Lodging-Houses" will do a good work in promoting the establishment of small Homes—they should surely always be small—throughout the country.

H. BOSANQUET

The State and the Doctor. By SIDNEY and BEATRICE WEBB.
(London : Longmans. 1910. Pp. 276.)

MR. AND MRS. WEBB are engaged in a vigorous, and, as I believe, beneficent agitation for the reform of the Poor Law on the lines of the Minority Report. In agitation repetition is essential. The agitator has no time, and ought not to have any time, to put his programme into new language, or think out his principles in a new form. As long as a sufficiently large number of people read or hear his appeal, it is a positive advantage, with a view to common action, that it should reach them through the same instances and even the same phrases. At the crisis of an agitation, time and ingenuity should be devoted, as Cobden found, not to making new speeches or even new documents, but to discovering new ways of bringing existing material into the minds of those who are still indifferent. Accordingly Mr. and Mrs. Webb, just because they are in earnest about their movement, have, since the conclusion of their enormous labours in the preparation of the Minority Report itself, shown extraordinary skill in inducing more and more people to read either the whole or some particular part of it. They compelled the Government to issue two huge editions of the original Report at an unprecedentedly low price. They have themselves issued two editions appealing to different audiences. The "National Committee for the Prevention of Destitution" has reprinted successive sections of the Report in pamphlet form. Now, for the benefit of the medical profession, all the sections dealing with medical treatment are brought out (with a certain amount of rearrangement and revision) as a cloth-bound book called "The State and the Doctor."

The only person who has any right to complain is the conscientious reviewer who has read the Report and takes up the book in order to bring his knowledge of the subject up to date. If he has the two documents both open before him, he will find himself constantly thinking that he is entering on new matter, only to find some familiar fact or quotation which leads him to

discover the passage in the Report, perhaps a hundred pages earlier or later than its context in the book.

But even if at the end of his work he finds that the new pages which he has read are not many, he may be thankful to have followed again a demonstration of the confusion and suffering which has resulted from the existence in the United Kingdom of a system of medical treatment of the destitute unconnected with, and therefore getting neither help nor instruction from, the general public health service. The authors in their short "historical introduction," make the rather interesting suggestion that the completeness of this separation may have been originally due to Chadwick's notoriously bad temper. Speaking of the Public Health Act of 1843, they say: "Chadwick had, in fact, by this time fallen out with his nominal superiors, the Poor Law Commissioners, and had transferred all his interest and enthusiasm to the sanitary side of the work. He was accordingly glad to break this off from the unpopular Poor Law Commissioners, and to become . . . the leading personage in a new Government Department, the General Board of Health" (p. 5). Unfortunately, in 1871, when the Local Government Board was established, official tradition was already too strong to permit of any effective amalgamation even of the central control of public hygiene.

From the point of view of the student of sociology one of the most disastrous effects of this separation has been to withdraw the whole system of Poor Law medical relief from the checks and guidance provided by proper statistics. But even while the public provision of medical treatment remains in its existing condition of disunity the Local Government Board might insist on a general and uniform system of statistical returns. Whether the Education Committee of the London County Council send crowds of children to the outpatients' departments of the hospitals, to be given boxes of ointment for defective vision or bottles of medicine for ringworm; or a rural Board of Guardians receives expectant mothers into the sick-wards of a general workhouse, the State ought at least to learn, and publish, the results.

GRAHAM WALLAS

Life and Labour in Germany. (London: The Labour Party. 1910. Pp. 72.)

INVESTIGATORS who have spent laborious years in the endeavour to understand some of the complex economic and sociological problems which the modern development of Germany

presents, must have been bewildered by the succession of reports upon German working-class conditions which the various commissions and deputations of Free Traders and Protectionists have produced of late. An investigator of the older school can only envy the facility with which the conventional fiscal delegation is able, on the strength of a few days' ramble, to resolve difficulties and complexities which in his own case have yielded only to long and patient inquiry, and to arrive at bedrock facts and ultimate conclusions which he, with his pedantic proneness to reserve and caution, has not been able to achieve at all. Well, there is perhaps not one of us who, in these hurrying modern days, runs no risk of becoming old-fashioned and out of date, and if the tariff trippers, *pro* and *contra*, have succeeded in laying down the lines of a new and improved lightning method of investigation, the slow-going truth-seekers of an older age must try to take their *congé* with a good grace.

One is tempted to complain of the publication which has suggested these chastening reflections, that in breadth of generalisation and general "cocksureness" it falls below the standard of the usual fiscal deputation literature on Germany. For if the new lightning method of investigation does not yield absolutely certain results, it fails to justify itself, and we might as well go back to the slow and discredited method of scientific inquiry. Seriously, it is only fair to say that the Labour Party delegation found on confronting social conditions in Germany that great cautiousness in judgment was necessary, and many of its conclusions are accordingly marked by a reserve which some other deputations have regarded as superfluous. Nevertheless, even the most cursory reading of this report is sufficient to show that, however honest the intentions of the delegates, their outlook has been partial, and they have often mistaken impressions for facts.

The report is divided into nine sections, in which the writers discuss general social conditions in Germany, the cost of food, housing and rents, tariffs, unemployment, wages, household expenditure, hours of labour, and finally the conditions as to wages, hours of labour, etc., prevailing in certain trades and occupations, viz., iron and steel founding, engineering, steel works, textile factories, printing and railway service.

The conclusions arrived at are in all cases stated with moderation. As to the cost of food, the delegates found that "high prices stare one in the face . . . we were deluged with statistics showing that the increase had been about 25 per cent. during

the past ten years." The bread eaten by the working classes is said to be of rye and inferior to British bread (a statement to give pause to those degenerate Englishmen who are only too pleased to eat German rye bread when they can get it), the price being $1\frac{1}{2}$ d. and 2d. per lb. Coffee is bought mixed with chicory at the price of from 10d. to 1s. per lb.; butter is said to be a rarity in the "poorer" working-class homes (as in England), and margarine and other substitutes are largely eaten; sugar costs from $2\frac{1}{2}$ d. to 3d. per lb.; the cheese generally eaten costs from 8d. to 10d. per lb.; milk costs "about the same or perhaps slightly less than in England," viz., $1\frac{1}{2}$ d. per pint; and potatoes and vegetables are "very reasonable in price." As to meat, we are told, without any localisation of the figures, that beef costs from $7\frac{1}{2}$ d. to 11d., veal about 10d., and pork from 10d. to 1s. per lb., but the writers omit to state that this meat is all home-grown. Horse-meat, costing from 4d. to 5d. per lb., is said to be "eaten to some extent," and fifteen horse-meat shops were found in one town visited; "there is no concealment about the matter, although there is naturally some reticence to speak of it on the part of those who consume it."

The delegates were unfavourably impressed by the housing of the working classes in the towns visited. "The German workman," they say, "is housed in barracks, and, room for room, pays for his housing nearly double the amount paid in Great Britain, exclusive of London." If only the very large towns are here referred to, the statement may be true; applied to German housing conditions generally the statement is inaccurate.

A large quantity of data are given on the subject of the wages earned in various trades, and the delegates state that a "feature common to Germany is that the wages of the labourer are higher relatively to (those of) the mechanic than in this country," though they found exceptions which "were somewhat confusing, and at first misleading." They place the earnings of skilled mechanics in the large towns for a normal working day (which is longer in Germany than in this country, the usual range being from $9\frac{1}{2}$ to 10 hours) at about 5s. 6d., but add that there are greater differences between the highest and lowest rates than in Great Britain.

Although the Labour delegates refrain from too positive assertions, they are evidently of opinion that German working-class conditions in general are inferior to those prevailing in this country. They point out, however, various compensating facts, such as the excellent provision against sickness and invalidity

enjoyed by German workers ("we found workmen at home, and certified as sick, who were in receipt of nearly as much as they would have been earning if at work"); the "social welfare" institutions connected with so many industrial enterprises, both public and private; the amenities of social life provided by municipal bodies, etc. They are less reserved in their criticism of Protection, which they contend has inflicted great injury upon the working classes, and they point to the known fact that many German manufacturers are quite ready for the abolition of the tariff. Finally, the report pays a deserved tribute to the spirit of method and organisation which runs through German life, and which accounts in a far greater degree than is generally supposed for the wonderful progress which Germany has made in various directions during the past half century.

The foregoing fairly indicates the ground covered by the Labour Party's latest contribution to the literature of the fiscal question. Without knowledge of sources and methods of collection, it would be an unprofitable task to weigh the value of much of the statistical information contained in the report. The most interesting and useful parts of the report are those which embody the delegates' first-hand observations of such labour conditions as can be judged safely without relation to figures; many of these, evidently written by men who thoroughly understand the trades of which they speak, are illuminating and suggestive, and the same may be said of not a few reflections upon German social and domestic life scattered throughout these 72 pages. Yet, in spite of all, the lightning method of investigation is not convincing and can never be exhaustive. Facts are not like mushrooms to be gathered at the surface, but like minerals, mined underneath.

WILLIAM HARBUTT DAWSON

A Congressional History of Railways in the United States. By LEWIS HENRY HANEY, Ph.D. (Madison, Wisconsin. Vol. I., to 1850. Pp. 273. Vol. II., 1850-1887. Pp. 335.) Reprinted from *The Bulletin of the University of Wisconsin—Economics and Political Science Series*.

THESE two volumes not only contain an important part of the railway history of the United States, but are at the same time a valuable contribution to the political and commercial history of the period covered. In the earlier years the position of railways as a factor in commerce was little understood, and it was not until the second period was well advanced that it was generally con-

ceded that railway operations fell within the scope of the inter-State "commerce" of the Constitution.

The railway history of the United States may be said to begin in 1827, when the first railways for general commercial purposes and for passengers were chartered. Three years later it was settled that the method of traction should be steam, and shortly after the controversy over wood and stone sleepers was decided in favour of the former.

The early history of rates is very similar to that of this country. The charges for haulage were separated from the tolls for the use of the road. Maxima for rates were laid down, and at this time were of substantial significance. In one respect there was a difference. The idea appears to have prevailed in Congress "that rates were to be based solely on cost—upon weight, bulk, distance and grade."

The way for railways was not clear. Canals and roads, many of which had received substantial aid from the State, were in possession of many of the most profitable routes. The controversy over the relative merits of the three means of transport was long and bitter. Roads succumbed first, but it was not until close on 1850 that railways were finally recognised as superior to canals.

In this early period the mail service had an important influence on railway development. In 1838 all railways in the United States were constituted "post" routes. Friction between the postal authorities and the railways led to maximum rates being fixed for the carriage of mails; whilst the improvement of the mail service was the most important factor which led to railways superseding canals and roads as "national improvements." The aid was given in various ways. In some cases the Government undertook surveys. Remission of duties on railway iron was general. Many railways received land grants, which took the forms of gifts of right-of-way and of the proceeds of land sales. With the exception of land grants, all these forms of assistance came to an end by 1850. The history of the earlier land grants is closely associated with the big social and political questions of the day. The questions of Slavery and Homesteads, States Rights as opposed to Federal Government, the unsettled and struggling West as against the more developed East, one and all had their influence at various times on the policy pursued.

The period of the great land grants did not come until the early 'sixties with the passage of the charters for through railways to the Pacific. The advantages of such railways for military and mail purposes were insisted on. The fear of a separate

Government being established West of the Rockies was a potent influence. The desire to participate in the Asiatic trade and the general flow of emigrants westwards were additional reasons for the establishment of Transcontinental railways. About 1871 the opposition to further land grants became so strong that we may look on this as the close of the period of State assistance. After the Civil War the conflict between settlers under the homestead laws and the railways became acute. The operations of the railway companies were in many cases fraudulent and overbearing. The growing hostility to corporate activity culminated in the Granger movement. At the same time the demand for land—largely for soldiers—increased. These, coupled with the realisation that land grants were no longer economically desirable, brought about the change.

Looking back over the period from 1835 to 1870, the policy pursued seems to have been one of encouragement of railway construction by assistance from either the individual States or Congress or both. The need for improvement in internal communication was strongly felt. The conflict between States Rights and Federal Authority precluded Congress from undertaking the actual construction of railways, and so encouragement was given to induce construction by private enterprise. The assistance was not always given wisely. Little care was taken to see that conditions attached to the assistance were observed. In fact, Congressional action was opportunist in the extreme. The prevailing spirit seems to have been to get railways built somehow, and leave the future to take care of itself. The principle of encouraging railway construction was right. For the failure to grasp what the position might become when railways were measured not by hundreds or even thousands of miles, but by tens of thousands, a heavy penalty has had to be paid.

Turning back a little, an important development can be noticed in the early 'fifties. A movement was on foot for a modification of the duties on railway iron. The railways organised to bring pressure to bear on Congress. This ultimately developed into a regularly organised railway lobby. Later, in 1887, the Pacific Railway Commission reported that in their judgment "moneys of all the bond-aided roads have been used for the purpose of influencing legislation." Whilst direct proof of bribery was absent, it was certain that very large sums had been expended. The railways made frequent use of money and passes to influence legislation. State and Federal Courts were also affected. "Not only was there lobbying at the National

Capitol, but in the legislative seats of Kansas, Nebraska, Colorado, and elsewhere, full representations were maintained, and millions were expended for the services of lawyers to influence legislation."

So far as Congress was concerned, the history of railway development onwards to 1887 was mainly a matter of Pacific railways. First one part and then another part of the country was traversed, until by 1883 one might have journeyed from the Atlantic to the Pacific by four different routes. A very interesting comparative table dealing with these railways is given, showing the Government aid and the forms in which it was given, also the conditions attached thereto—limit of time for construction, number of directors and by whom appointed, capitalisation, rates, character of road, etc.

Apart from this, the great interest of this period lies in the regulation of the railways by Congress, and the latter half of the second volume is devoted to this. The earlier regulation was not based primarily on the "Commerce Clause." The outbreak of the Civil War brought with it problems of transportation. Military necessities made it expedient that the Government should have power to use the railways without interruption or obstruction. An Act was passed in 1862 authorising the President of the United States in certain cases to take possession and operate railway or telegraph lines. Fear was expressed that this Act granting the power to take possession might be made the nucleus of a comprehensive system of Government railways, and in the same Session a joint resolution was passed which placed limitations upon the power of the executive to prevent this from occurring. The chief effect of the War on railways was to cause a wave of nationalism which threatened to break down constitutional barriers against Government regulation.

The War also caused railways to be taxed. As a business pre-eminently inter-State in character, the railways were well suited for Federal taxation. As producers of revenue the taxes were very effective. They were, however, purely War taxes, and were repealed in 1870. A point of especial interest is that these taxes were not intended to be taxes on the railway industry. They were arranged in such a way that the burden of them could be shifted on to other shoulders, and this was the intention.

It was noted above that the mail service was the cause of some of the earliest dealings of Congress with railways. From 1850 to 1870 this matter was left very much alone, and as the result serious troubles developed. The Postmaster-General had to report that the railways were carrying the mails or not as

they pleased. Again he reports—"It is manifest that their present attitude—seemingly defiant in its tone, as it is disorganising in its tendencies—cannot be endured without humiliation to the Government. . . ." On the other side it must be pointed out that the method of paying the railways for mail services was very unsatisfactory. No change had been made since 1845, and the refusal to give the facilities on the ground of inadequate pay had considerable justification. With 1870 a period of regulation of the mail service begins. The general "Post-office Act" of 1872, the Act of 1873 modified in 1876 and 1878, altering the basis of payment for Post-office service, the Acts of 1879 and 1881 dealing with the provision of the Post-office car service, indicate the change which had taken place. The mail service was no longer pleaded as a ground for aid. The relation had changed to one of regulation.

The earlier regulation of the dealings of railways with commerce was negative in its character. The jealousy of the States one of another led some of them to refuse charters to railways which would tend to benefit their rivals, and to grant monopolies to others. After several years of effort, a Bill was passed in 1866 to facilitate communication among the States. This aimed at breaking down State-granted monopolies. In the discussions the shameless use of political power by the railways was a frequent subject of comment.

Positive regulation really starts from the Granger movement. The farmers depended upon the profitable sale of their wheat in Eastern markets. When some years after the War prices fell and railway rates remained high, the outcry was great. The railway methods of the time were such as to warrant attack. "Corruption of political units; wastefulness and mismanagement through 'rings,' construction companies, fast freight lines, etc.; fluctuations and discriminations in rates due to fierce rate wars—all these things and more were rife." Various proposals were made for dealing with the position. Extensions of inland waterways were advocated; schemes for a Government railway were put forward. Finally, in 1874, the House passed a Bill forbidding unreasonable charges and providing for a board of railway commissioners with power to make a schedule of reasonable rates. This is probably the most notable attempt to regulate the railway rates prior to the Interstate Commerce Act. The Granger movement did a good work. It taught railway officials that they were administering public highways; it taught the public that railway property was entitled to reasonable profit.

Even yet the power of Congress to regulate railways under the Commerce Clause was not generally conceded. In fact, it was not until 1886 that all opposition vanished. The development was gradual—from negative regulation to partial positive regulation, to general positive regulation. The Inter-State Commerce Act of 1887 closes the period. By the Act a Commission was established, pooling was forbidden, whilst a long-and-short haul clause was included. Further, the Commission was directed to secure publicity of rates. Important as the issues involved were, a most extraordinary ignorance of railways was shown in debate. The realisation of this more than anything else turned the scale in favour of a "Commission," about which there had been a strong difference of opinion.

An interesting feature was the support given by the railways to the Bill. The Federal Government had dallied so long that the States, one after another, had taken up the matter. The Acts of the various States lacked uniformity and differed in severity. The railways are well described as "invoking Federal regulation to escape the furies of State legislation." The change was significant. "The day for consigning the public to damnation was passed." The railways could no longer exact all the traffic could bear.

The preparation of this history has been done with great care. The sources of information are given in minute detail, and Dr. Haney deserves our thanks for a most valuable piece of work. One fault we have to find. The second volume contains an undue number of clerical errors. As examples we would quote the following:—On page 17 "between 1840 and 1850" is printed where "1850 and 1860" is intended; on page 62 1853 appears for 1863, and on page 63 "5 ft. 8½ in." is given as the standard gauge. The errors are so many that it would be an advantage if a list of errata were prepared and issued.

W. T. STEPHENSON

Ireland from the Union to Catholic Emancipation. A Study of Social, Economic, and Administrative Conditions. 1800–1829. By D. A. CHART, M.A. (Dent and Sons. 6s.)

It is not every Irish student of history who is qualified to pass an impartial judgment on the social and economic condition of Ireland in the three decades immediately following the Union. The passions roused by the Act of Union, and yet more by the means employed to carry it, are with us still; political parties

in Ireland are differentiated by their attitude towards that Act. In Ireland it is difficult for a man who takes an interest in public affairs to avoid the bias with which party views will affect his judgment. Mr. Chart has conquered the difficulty, he writes in a calm judicial temper, and, as far as one may infer from his book, has no cause to advance other than that of historical truth. He is, as the preface indicates, an official of the Public Record Office, and the nature of his duties, besides affording him favourable opportunities for research, must also have contributed to develop in him a respect for historical evidence as well as a capacity for appreciating it.

The economic problems which meet us in the period reviewed by Mr. Chart are of special interest. That there occurred a remarkable decline in manufacturing industry, and an extension—it can hardly be called a development—of agriculture is a fact which no one questions. Mr. Chart is emphatic in asserting it; the statistics which prove both parts of the statement are available, and it might have added to the value of his book had they been used more freely. Assuming, as we may do without hesitation, that the facts were as Mr. Chart describes them, we ask how they are to be accounted for. The expansion of agriculture finds an easy explanation. The high prices for agricultural produce maintained during the long-continued wars with Napoleon put a premium on the farmer's industry which had its effect in Ireland as well as in England, and the political influence which in Ireland the votes of the "forty-shilling freeholders" gave to the landlords induced them to multiply the small holdings. But the causes of the decline of the manufacturing industries is not so apparent. Mr. Chart's explanation is as follows:—"Regarding Ireland in its productive capacity as a single whole, its relative advantage undoubtedly lay in the pursuit of agriculture and the supplying of provisions. In manufactures, on the other hand, especially those of a highly organised nature, the relative advantage lay rather with Great Britain, particularly in view of the much more rapid introduction of labour-saving machinery into that country. Under stress of British competition, even in the home market, Irish cotton and woollen manufactures gradually declined, and were by 1829 not far from extinction. The Ulster linen industry was only just saved in time by the adoption of power spinning and weaving." The explanation is good as far as it goes. But it does not go far enough. How was it that the cotton and woollen industries were unable to hold their own against English competition, and how was it that the linen

industry was able to save itself? It is true that improved methods of manufacture were adopted by the linen makers; but was not the adoption of the new methods open to the manufacturers of cotton and woollen goods as well? Moreover, the cotton industry was established in that portion of Ireland which is usually described as the home of the industrial virtues—Belfast. In the year 1800, according to evidence cited by Wakefield (Vol. I., p. 705), it gave employment to 37,000 persons within a circuit of ten miles round that town. It was promoted by men of singular enterprise, by Joy. McCabe, M'Cracken, and others, who had introduced the spinning jenny and the carding machine, and employed water-power to work them. At Colton, in Louth, 1,300 looms were busy, and at Stratford, in Wicklow, a factory erected at a cost of £40,000 gave employment to 500 winders and weavers. Wakefield attributes the prosperity of Belfast and its neighbourhood to the spread of the cotton industry. "In Antrim," he remarks, "it is astonishing with what rapidity the linen looms are exchanging for those of cotton, and they are beginning to spread to a considerable distance from Belfast." And again, "Forming a circle at the distance of twenty miles from Belfast, it will be seen that commerce and the cotton manufacture have, by their influence, diffused happiness and prosperity throughout that favoured spot, and given to the people an air of ease and affluence very different from what is observed in other parts of the country." Yet the industry which was "firmly established" and progressive, which had, as Wakefield pointed out, "obvious advantages over the linen manufacture," was, seventeen years after his work was published, "not far from extinction," and the linen industry, which the same observer regarded as a less valuable national asset, was maintaining itself successfully against English competition. How is the difference to be explained? We can discover no advantage on the side of the linen manufacture other than this: its interests were watched over by a board of trustees appointed by the Government, and endowed with an annual grant of £20,000, and this assistance, a continuation of the policy of the Irish Parliament, it enjoyed up to the year 1827. Grants were, no doubt, made by Parliament in favour of cotton and woollens, but this fitful aid, administered through the Distressed Manufacturers' Relief Committee, was not comparable to the steady and systematic favour accorded to linen. Whatever may be said of the political results of the Union, there can hardly be a doubt as to its effects upon the young industries of Ireland. The marvellous growth of

prosperity in the country in the decade following 1782 was due, before all else, to the development policy of the Irish Parliament; it was impossible that an assembly of which the great majority were Englishmen, concerned primarily for English interests, and with an imperfect knowledge of Irish conditions, could bestow upon Irish industries the attention they had received from the native legislature.

Mr. Chart's book has much that is of profound interest to the Irish reader on social life in Ireland during the period with which he is concerned, on the relations between landlord and tenant, on the State Church, the magistracy, education, municipal administration, poor relief, and other topics which enter into such a survey as he has undertaken. In his preface he modestly expresses the hope that "the work will be considered a contribution to knowledge," the judgment of the reader will, without doubt, amply bear out this anticipation.

T. A. FINLAY

The Strength of England. A politico-economic history of England from Saxon times to the reign of Charles I. By J. W. WELSFORD, with a preface by DR. CUNNINGHAM. (Longmans, Green and Co. 1910. 5s. net.)

THE half of this book which belongs to the ECONOMIC JOURNAL is not easy to review. It is the unfinished MS. of a dead man, lovingly and generously commended to us by one who prized him and his work. Spirited, independent, passionately patriotic, it is neither learned nor, I venture to say, wise. I should hesitate before endorsing Dr. Cunningham's commendation of it as a "masterly sketch," which "no serious student of our political life in the past can afford to neglect." Yet students will do well not to neglect it, for it stirs the mind—if only to dissent—more than some writing more learned and more wise.

Both text and bibliography suggest an inadequate groundwork of economic knowledge. Very probably the bibliography is incomplete. It contains at most twenty-five economic works, not all relevant to the period covered. There is nothing of Vinogradoff or Seeböhm, of Mary Bateson or Mrs. Green, nothing of Scharnz or any other German, to mention a few obvious omissions. Why, even in a first draft, the English of 1066 should be called compendiously "shepherds" (p. 42) I cannot think. And the phrase "the craft gilds or medieval trades unions" (p. 127) is suspicious, though it may be only a bit of popular writing. More serious

than lack of information is an apparent incapacity to handle historical causation. For instance, "Parliament in 1381 passed the first English Navigation Act. . . There was, therefore, an English fleet prepared to defend England from invasion" (p. 156). From the context I assume—though I am not absolutely certain—that "therefore" is to be taken strictly: a more than usually short-lived medieval Act of Parliament is to be taken as effecting what its promoters hoped to effect. Or again (p. 42)—"England owes the commencement of her national life to the protective policy of her towns." The value of that policy is well worth discussion; but only charlatans or dogmatists credit to single causes complex processes of national life.

Mr. Welsford was the dogmatist. To him all "protection" was a seed of good, and no growth is too great or complex to be ascribed to it. Like many dogmatists of his school, he spent much time in knocking down a sort of imaginary dogmatists of another school. He explains (p. 248) how the Elizabethans prohibited foreign wool cards. "According to the Free Trade theory English cloth-making ought to have been injured; but, in fact, England before long made not only the best cloth, but the best wool-cards. This ounce of fact is worth a ton of theory." Whether the "ounce" is worth anything I do not know. Its value for present-day purposes depends entirely on circumstances connected with the manufacture, trade, and smuggling of cards in the sixteenth century, with which I am not, and Mr. Welsford can hardly have been, acquainted. Supposing it really valuable it is but an illustration of a very familiar "theory" about infant industries.

Most unlikely occasions are improved for the sake of the faith. Augustus taxes the trade from Britain to Gaul (p. 4). "It is a curious coincidence that the foreigner to-day shares the view of the Roman of two thousand years ago, that when the British fail to reply to Continental tariffs, the Continental customs duties are equivalent to a tribute paid by Britain. The British meekly paid the tribute. . . ." In the thirteenth century (p. 46) "the citizens of one town treated an Englishman from a neighbouring town as a foreigner. In this respect there is a marked resemblance to the treatment which Great Britain now extends to her Colonies." "Curiouser and curiouser," as Alice said. The chapter on Simon de Montfort is headed (p. 91) "The Rights of the People asserted by a Protectionist."

Mr. Welsford was always on the lookout for the interaction of economics and politics, and that is why I agree in part with

Dr. Cunningham. Among other things, his discussion of the economic aspects of the seventeenth century, exaggerated and doubly "*tendenziös*" (see p. 285—"when James' innocent son was publicly murdered") has set me thinking. He has stated as facts a number of propositions that deserve inquiry, though his equipment and method must prevent scholars from accepting any one of them on his sole authority.

J. H. CLAPHAM

The Scottish Staple in the Netherlands. An Account of the Trade Relations between Scotland and the Low Countries from 1292 till 1676, with a Calendar of Illustrative Documents.
By MATTHIJS P. ROOSEBOOM, M.A., D.Litt. (The Hague : Martinus Nijhoff. 1910. Pp. xiv + 237 + ccxvi.)

DR. ROOSEBOOM'S book is in many respects supplementary to that published last year under the joint authorship of the late Professor Davidson and Mr. Gray, which dealt with the same subject. The latter was planned on wider lines. It gave a general introduction to the study of Scottish foreign trade, and, in the consideration of the staple itself as a sub-division of the same movement, concentrated attention on this institution when it was located at Veere. Dr. Rooseboom confines himself to the investigation of the rise of the staple, and hence he limits his work to the period when it flourished, closing at the year 1676. Further, his method of treatment presents certain points of individuality. The first half of the book (pp. 1-237) consists of a historical account of the system, while the second (printed as pp. i to ccxvi) consists of a series of documents which have been copied from various archives on the Continent. These consist of contracts relating to the staple, letters and papers concerning it, and other writings of various kinds which bring the reader into contact with contemporary opinion on the various negotiations about proposed changes of the staple-town.

It is remarkable that in two works, both of considerable size dealing with the same subject, there is so much in each that is not to be found in the other. It is a tribute, too, to the character of Dr. Rooseboom's book that one comes away from the reading of it with a strengthened interest in the organisation which he has described. In THE ECONOMIC JOURNAL (xix., p. 207) attention was drawn to the problem, suggested by *the Scottish Staple at Veere*, namely, what was the reason that various towns in the Netherlands spent so much in endeavouring to obtain the staple-

contract? Dr. Rooseboom's book provides much information on this point. First, we obtain details of what was given or offered by towns competing for the Scottish staple. For instance, in all cases freedom from Customs and extensive remissions of the excise on drink and food were promised. In addition to this, from 1513 to 1522 Middelburg offered a money-payment of "11,000 golden guilders" (pp. 33-38), and in 1612 Veere involved itself in large expenses, such as gratuities, the building of a Scottish Church, the paying the rent of a national (Scottish) inn, of a house for a minister as well as his salary (p. 145). In this book, as well as the previous one, the magnitude of this outlay is a matter of surprise. Dr. Rooseboom suggests in a tentative manner several explanations. It is to be remembered that the town which was made the staple-port obtained a monopoly of the staple goods, and this brought purchasers of these to attend its markets. Further research might show that the staple-port made good its outlay on obtaining the contract by the charges levied on merchants of other towns. It may be noted that something of this kind seems to have happened in connection with the Host-men of Newcastle. Another suggestion of Dr. Rooseboom's is that high bids made for the staple were due to municipal jealousy, "whence the securing of the staple for their own town might even be of secondary interest to their preventing another city from having it" (p. 71). To these theories another may be added, i.e., the importance assigned to the raw materials exported from Scotland (Davidson and Gray, p. 429), which were worked up in the vicinity of the staple-town and a part exported to Scotland. This view is supported by the clauses in a proposed contract from Bruges in 1469, according to which, as a great concession, the Scots were permitted to bring cloths to be dyed in Flanders, which they might ship home again, but under no circumstances were they allowed to sell cloth in the Low Countries (Rooseboom, p. 24).

W. R. SCOTT

Die Deutschen Grossbanken und ihre Konzentration im Zusammenhange mit der Entwicklung der Gesamtwirtschaft in Deutschland. By Dr. RIESSER. (Jena: Gustav Fischer. Pp. 715.)

It takes a long time to read the 715 pages of the above book, written by Geheimer Justizrath Riesser, but it is worth while to study all he says concerning the principal

German Banks and their concentration in connection with the economical development of Germany. For the author, who during several years has been manager of one of the leading Berlin banks, and who is now ordinary Honorary Professor at the Berlin University, and the President of the Hansa Bund (an institution which has been created to defend the interests of trade and industry), shows, with great competence, what has been done by the principal banks to develop Germany's trade and industry before and after the foundation (in 1870) of the German Empire, how German banks have been created abroad, etc. Especially the particulars given by him concerning the efforts made by the German banks to extend their business in countries beyond the sea, and the way they proceed to issue National and foreign loans, constitute syndicates, and work in the interest of trade and industry, are worth reading.

In the second part of his book, Justizrath Riesser treats the great movement of concentration of the banks which has taken place since 1870, and which still continues, so to say, without interruption. He explains also the reasons which are in favour of such concentration, showing, however, how this concentration has led to the constant augmentation of capital and present powerful position of the leading German banks, which have at present a capital of 1,204 million marks, viz. :—

		Sterling millions
The Deutsche Bank	200 million marks	10
Dresdner Bank	200 " "	10 "
Disconto Gesellschaft	170 " "	8·5 "
Bank für Handel und Industry	160 " "	8 "
Schaaffhausenscher Bankverein	145 " "	7·25 "
Berliner Handelsgesellschaft	110 " "	5·5 "
Commerz und Discontobank	85 " "	4·25 "
Nationalbank für Deutschland	80 " "	4 "
Mitteldeutsche Creditbank	54 " "	2·7 "
	<hr/> 1,204	<hr/> 60·20

C. ROZENRAAD

Die Einfluss der Bank und Geldverfassung auf die Discontopolitik im Deutschen Reich, in England, Frankreich, Oesterreich-Ungarn, Belgien und den Niederländer. Von GEORG SCHMIDT. (Leipzig : Duncker and Humblot. Pp. 120.)

THIS book gives full particulars concerning the banking and currency systems of six of the leading commercial nations of the world, and compares the discount and gold policy of the issue banks in those countries. In comparing, however, the different

banking systems, the author has not explained as fully as would have been necessary, that England has a more developed banking and cheque system than any other country, and above all, that the Bank of England is the clearing house of all nations, liquidating not only the liabilities of Great Britain, but also those of Europe with other continents, and that London is the banking centre of the world.

But Mr. Georg Schmidt's book is full of interesting facts concerning the fiduciary circulation, gold and discount policy of the above issue banks, and he has rendered a great service to the banking community by putting these facts together and showing the influence of the different banking and currency systems on the discount policy of the banks. What he says of their transactions in foreign bills, gold, etc., is worth reading.

With great clearness he explains also the modifications which have taken place in the new German Bank Act of June 1st, 1909, which partially came already into force on January 1st, 1910, and which will be applied in full on January 1st, 1911. With great warmth the author pleads against the stipulation contained in the new Bank Act, that the legal maximum, free of tax, for the issue of banknotes by the Imperial Bank of Germany, originally fixed at 250 millions, will be raised from January 1st, 1911, from 450 to 550 million marks, and at the end of every trimester to 750 million marks. It is indeed a fallacy to fix a limit for the issue of banknotes, for experience has shown that it is not in the interest of trade and industry to limit the fiduciary circulation of a country to a certain maximum, which it becomes necessary to increase continually. At times, when trade is active, more notes are required than when business is slack, and it is then in the interest of trade and industry that the first institution of the country in charge of the fiduciary circulation should not be hampered to meet the wants of the people by a legal maximum, above which no notes may be issued unless a heavy tax is paid. It is much better that no legal prescriptions should be given as to the maximum above which no notes may be issued, but to stipulate, as is the case in Holland, that the issue bank may issue as many notes as are required, provided that the amount of its fiduciary circulation *together with the amount of its account current*s, is always covered to the extent of at least 40 per cent. by a reserve of gold, or in countries having a gold and silver standard, by a reserve of gold and silver.

C. ROZENRAAD

The Rupee Problem, a Plea for a Definite Currency Policy for India. By M. DE P. WEBB. (Karachi. 1910. Price Re. 1.)

MR. WEBB'S pamphlet, which is mainly reprinted from the *Times of India*, deals in successive chapters with the general problems of Indian currency during the last thirty years, with criticisms of the existing system, and with proposals for its improvement. The lucid survey of the question in the first chapter is in many respects admirable, but it is a little coloured, perhaps, by the disappointment of a bimetallist. The change in 1893 is characterised, for reasons which would apply to any deliberate change whatever, as "a wholesale violation of the fundamental principles upon which all modern monetary systems are based." This sentence is only correct as a statement of historical fact if the relative clause refers to the violation and not to the principles—for almost every country in the world, with the exception of Great Britain, has made a change, to which Mr. Webb's criticisms are applicable, within the last forty years. In the same way, Mr. Webb's speeches to the Karachi Chamber of Commerce, which he reprints at the end, show a willingness to be discontented with all the fruits of the new system. In 1903 Mr. Webb declared that "a restriction of the currency tends to produce a fall in prices, and a fall in prices means that every agriculturist and worker in India has to give more of his produce and substance than before in order to pay his taxes and other obligations. Such a state of affairs is the worst possible in which a country can find itself. . . . What this country requires and demands is a plentiful supply of rupee purchasing power, so that its industries and people may be healthily and judiciously stimulated." But in 1908, after a spell of high prices and plentiful coinage of rupees, he is still dissatisfied:—"The purchasing powers of the rupee have fallen—much to the disadvantage and loss of the poorer classes in this country. It is a matter for close study whether this depreciation in the value of our silver currency has not been in some measure encouraged by an over-coinage of rupees by Government." Mr. Webb's criticisms go far towards cancelling one another.

Mr. Webb's complaints in Chapter II. of the Government's vacillations of policy during the period which immediately succeeded 1893 seem well justified. The Government certainly did almost all that was possible to make a failure of the new system; but in recent years its nature has become much better understood, and, apart from the size of the gold standard reserve, about which

opinions may differ, there is little room for complaint. Of Mr. Webb's actual proposals an import duty on silver seems to the present writer to be wholly admirable, and has in fact been adopted by the Indian Government since Mr. Webb wrote his pamphlet. The tax, against which few good arguments have ever been adduced, seems to have been a great success, and ought to have been imposed long ago. But in his plea for the sale of Council Bills by the Secretary of State at a uniform price of 1s. 4d., Mr. Webb does not appreciate the full effects of what he proposes. The existing system of allowing the price of bills to fluctuate, in accordance with the intensity of demand, between "gold points" on either side of 1s. 4d., in which respect the Indian exchange resembles all other exchanges, has the effect of spreading remittances more evenly throughout the year. At a uniform price all the year round, the sale of bills would be on a larger scale than it is at present during the busy season, and on a smaller scale during the slack season. This increased irregularity, in itself an inconvenience to Government finance, might sometimes lead to the wasteful passage of gold backwards and forwards and to the more frequent use of the gold standard reserve on occasions of no emergency. But I should expect it, on the other hand, to exert a beneficial influence, though perhaps not a very great one, towards steadying the Indian bank rate and diminishing the difference between the annual maximum and minimum. Mr. Webb's statement that the fluctuations arise out of the arbitrary decisions of an official hardly gives a correct impression of the forces at work or of the general rules normally followed by the India Council.

With regard to the controversial question of the proper magnitude of the gold standard reserve, Mr. Webb is right, in my opinion, in holding that it ought to be considerably increased, and that the Indian Government, adopting throughout too optimistic a policy, have been too ready to divert the income of the reserve to other purposes. But when he maintains that the reserve should be held entirely in gold and mainly in India, he, together with many other critics whom the India Office have wisely withstood, is misapprehending the true character of the Indian system, as well as the general drift of currency reform in many parts of the world. In 1893 it was believed, no doubt, in many quarters that the closing of the mints was a first step towards the establishment in India of a full gold standard. In 1898 the Government of India still believed that this should be their ultimate goal. But since that time fuller experience in India and elsewhere has led

to the explicit recognition of a new system of currency known as the gold exchange standard, in which notes or token silver coins, which are permanently established as the predominant medium of exchange, are kept near a fixed par in relation to gold by Government control of the foreign exchanges. A much larger number of the countries of the world than is ordinarily recognised are now using this method in practice, and to a growing extent. They hold their gold reserve for the purposes of foreign trade only, and they economise the use of metal by holding bills on the chief commercial centres abroad with which they are in close relation. The method is sufficiently safe and is, in the matter of economy, vastly superior to a gold currency. Its widespread adoption in greater or less degree since 1900 marks a definite stage forward in monetary evolution, and is likely to have far-reaching effects in the future. The critics of the existing policy in the case of the Indian gold standard reserve are misled by its name into supposing that one of its proper objects is the accumulation of gold in India for the purpose of eventually establishing a full gold standard there. But when the real nature of the gold exchange standard is realised, it is clear that the reserve should be kept where it will be wanted for supporting exchange—namely, in London, and that, as long as it is kept in a fairly liquid form, there is great advantage and no loss in earning interest. It would be as reasonable to keep the gold reserve in Calcutta as to keep the reserve of coined rupees in London.

J. M. KEYNES

NOTES AND MEMORANDA

APPLICATIONS OF PROBABILITIES TO ECONOMICS.—II.

THIS second exemplification of applied Probabilities is like the first,¹ derived from the theory of Monopoly. The feature of that theory with which we are now concerned is the power of the monopolist to discriminate between different species of commodities and customers, not preserving that unity of price which characterises a perfectly competitive market. The subject may fittingly be introduced by a quotation from the earliest, and still, I think, the highest authority on the theory of discrimination, Dupuit. In his epoch-making paper on the measurement of utility Dupuit puts the following case :—

“Waterworks are constructed for the use of a town situated on a hill which had before great difficulty in procuring water. The value of water had been so high that an annual subscription of 50 francs was required to pay for a daily supply of a hectolitre [22 gallons]. . . . But now that pumps have been set up, that amount of water costs only 30 francs. As a consequence, the consumer will now employ water for less pressing, less essential wants. . . . Again, owing to the improvement of the pumps, or by the mere fact of increased consumption, the price is reduced to 20 francs. Our man will now want to have four hectolitres, so as to be able to clean his house every day. Supply him with water at 10 francs per hectolitre, and he will demand ten hectolitres, so as to be able to water his garden. At 5 francs he will demand twenty hectolitres, to maintain a sheet of ornamental water; at 1 franc he will want a hundred hectolitres, to have a fountain constantly playing.”²

With reference to this illustration, it may be asked : supposing that water for use within the house and water for external use, in the garden or pond, form two categories between which it is possible for a monopolist to discriminate ; is it to be supposed that when the price is lowered from 20 francs to 10 francs, and accordingly water begins to be employed for external uses, the whole of

¹ See *ECONOMIC JOURNAL*, vol. xx, p. 288, *et seq.*

² *Annales des Ponts et Chaussées*, 1844, vol. 2, p. 337.

the additional six hectolitres are employed on external uses or part on (additional) internal uses? The question is not explicitly raised by Dupuit; being indeed not relevant to his context. But I am concerned to postulate for the cases of discrimination with which I deal that a lowered price is attended with an increased demand for both of the uses. The species of discrimination which I have in view may be made more conspicuous by noticing its absence from another illustration given by Dupuit:—

“A footbridge is constructed between two populous quarters of a large town at a cost of 150,000 francs. At the rate of 5 centimes per passenger the proceeds prove to be only 5,000 francs [per annum]. The concern is accordingly a failure; the *entrepreneur* who had borrowed the greater part of the 150,000 francs, being unable to pay the interest on this sum, is soon ruined. The bridge is sold to an intelligent man who studies the demand for the use of the bridge, with the object of increasing his own profits. Thus he observes that his bridge connects a quarter of the town in which there are manufacturing works with the quarter in which the workmen live; and that they have, morning and evening, to make a long detour in order to reach their destination. The use of the bridge would greatly shorten the distance which they have to traverse; but a workman could not afford to pay out of his wages as much as ten centimes a day. . . . [Under the circumstances] the proprietor might insert in his tariff a clause to this effect: ‘For passengers wearing a cap, blouse, or jacket¹ the toll is reduced to 1 centime.’ [He will thus, suppose, gain an additional 3,000 francs from 300,000 new passengers—per working year of 300 days; but he may lose a part of his original profits, 5,000 francs, as] “a certain number of passengers at 5 centimes will, by reason of their attire, benefit by the reduction which was not intended for them.” [However] “by new artifices he may succeed in reducing the loss. Thus he may stipulate that the reduction of the toll shall be given only at the hours at which the workshops open and close, or only to workmen showing a certificate² of employment.”³

In this and other passages Dupuit suggests a type of discrimination which may thus be formulated. Considering the demand for the undiscriminated commodity (*e.g.*, passage of the bridge without respect of persons) as made up of the demands for different species between which discrimination is possible; it is (α) conceived that the demand for one species is independent of, uncorrelated with, the demand for another species—Dives will not offer less because the toll is lowered for certificated workmen; (β) it is admissible, if indeed it is not essential, that the demand for each

¹ Casquette, blouse, or veste.

² Livret.

³ *Loc. cit.*, 1849, p. 220.

species is practically limited (*e.g.*, the amount of water employed in internal uses will not be materially increased, however low the water-rate falls). A similar conception is entertained by M. Colson, who walks in the way of Dupuit.¹ I recognise that the conception is of great importance for the purposes of both theory and art. But I emphasise it here only to make clear that it is not the case with which I am about to deal. I am indifferent about the attribute (α), and I am not indifferent about (β); I postulate that when price is lowered the amount of each species—as well as of the genus—increases. For example, if there are two species (such as water for internal, and water for external use) whereof the amounts x_1 , x_2 are demanded at the prices y_1 , y_2 , I suppose that (for any assigned value of y_2) x_1 continually increases as y_1 diminishes.² The case is quite sufficiently important to reward attention to its properties. In dealing with it, I shall for convenience of enunciation confine my statements mostly to the variety in which only two species are discriminated; but the propositions thus enunciated are readily adapted to any finite number of species.

Concerning the kind of discrimination thus defined, I propose to prove the three following theses:—

1. *Very probably a system of prices can be assigned, such that both the monopolist and his customers may gain by discrimination.* The gain to consumers may well be so great that they are better off than they would have been, other things being equal, under a régime of competition.

2. *Probably the prices which the monopolist will fix in order to render his profit a maximum are such that the customers will lose through discrimination; except when the amount demanded of one species before the discrimination is much less than the amount then demanded of the other.*

3. *Probably, if the disturbance of prices caused by discrimination is not considerable, the portion of the monopolist's maximum which is due to the infliction of loss on the customers is inconsiderable.* For a small consideration the (perfectly self-interested) monopolist may be induced to adopt a system of prices such that the customers will not lose through discrimination; for a small addition to that consideration he may be induced to adopt a system of prices such that they will be materially the gainers.

The general presumptions above described as *à priori* are avail-

¹ See, for some account of M. Colson's conception, *ECONOMIC JOURNAL*, vol. xx, p. 59 *et seq*; and compare below, p. 454.

² Thus in the example designated C at p. 456 below, each of the component (as well as the compound) demands tails off towards infinity as the price sinks to zero.

able to show that the first proposition is probable. The gain of the monopolist by discrimination depending on the addition to or subtraction from each price, may be likened to the height, say z , of a surface shaped like a hill, varying with co-ordinates x and y , such as the longitude and latitude of any position on the hill. Now, in general one can reach a higher position on a hill when free to move in any direction than when one is restricted to motion along a certain path. In the case before us a limitation of this sort exists prior to discrimination; the monopolist being constrained to charge only one price for the whole class of commodity, or in other words equal prices for the two species. When this limitation is removed, the monopolist will tend to start off in a direction which has been called the *line of preference*;¹ perpendicular to another line on the plane of xy called the *line of indifference*. Likewise the consumer will have his lines of preference and indifference. But from our general knowledge of the relations between buyer and seller, we may presume that the lines pertaining to one party are not coincident with the lines pertaining to the other party. Accordingly the direction in which both parties can move together (from the original position), both being gainers by discrimination, is probably represented by an angle of sensible magnitude; the probability of mutual gain is measured by the ratio of that angle to four right angles.

The probability thus discerned will appear greater if we formulate what is known about the relation of the monopolist to his customers. On Fig. 1 let the addition to, or subtraction from, the price of one species be measured on the axis OX , OX' , and likewise the alteration of the other price on the axis of y . Prior to discrimination, the monopolist was constrained to move along a right line, representing the condition that the two prices must be the same, the line TT' making equal angles with the axes. When the monopolist becomes free to move, otherwise than in this line, his line of preference is evidently not in the same quadrant as this line; not in the direction implying that both the variations of price are positive—between OX and OY —nor yet in a direction implying that both variations are negative—between OX' and OY' . For if either of these directions represented the monopolist's preference, he would not, prior to the discrimination, have stopped at O . Not his line of preference, but his line of *indifference* slopes in the same general direction as the original path. In the figure the line TT' does duty both for the path of constraint and the line of indifference; but these loci are not

¹ *Mathematical Psychics*, p. 22, and context.

$x = A - By$; where A and B are numerical coefficients. The monopolist's profit, supposing at first that cost of production may be left out of account, $= xy = Ay - By^2$. This will be a maximum when $y = \frac{1}{2}A \div B$ and accordingly $x = \frac{1}{2}A$.¹ If we call this maximum value of x , a , and the corresponding value of y , b , we have $A = 2a$, $B = a \div b$; and accordingly the equation of the (average, generic) demand-curve may be written in the form

$$\frac{x}{a} = 2 - \frac{y}{b}.$$

This line is represented by BA in Fig. 2; on the supposition that $a = b$ (as may always be effected by properly taking the units of commodity and price).

Let us at first suppose (in accordance with the main portion of thesis 2) that x_1 and x_2 are equal at the price which is fixed by the monopolist prior to discrimination. Let us also for the present suppose that there is no correlation² between the demands for the two species of commodity. Then the two specific demand-curves (as they may be called, although they are straight lines) will intersect at the point P , which represents the price and *half* of the quantity demanded before the discrimination. The two curves will diverge at that point as represented by the dotted lines in Fig. 2, in such wise that any horizontal line intercepts between the *average* demand-line (AB) and either of the specific demand-lines (*e.g.*, A_1B_1) a length equal to that which it intercepts between the former line (AB) and the other specific demand-line (A_2P produced as far as the point at which the ordinate $= OB_1$) For instance, on the horizontal line through ω , the intercepts $\alpha\alpha_1$ and $\alpha\alpha_2$ are equal. Likewise $AA_1 = AA_2$.

This property may conveniently be represented by the following construction:—

$$\text{Let } x = a(1 + \xi); \quad y = b(1 + \eta).$$

Then if ξ and η are measured from P along the rectangular axes, the relation of ξ to η is represented by the line AB (provided that $a = b = 1$). In other words, $\xi = -\eta$.

$$\begin{aligned} \text{Likewise, if } x_1 &= a(1 + \xi_1), \quad y_1 = b(1 + \eta_1), \\ x_2 &= a(1 + \xi_2), \quad y_2 = b(1 + \eta_2). \end{aligned}$$

$\xi_1 = -q_1\eta_1$, $\xi_2 = -q_2\eta_2$, where q_1 and q_2 must be so selected that $q_1 + q_2 = 2$; say $q_1 = 1 + \beta$, $q_2 = 1 - \beta$, where β is a proper fraction.³

¹ I use the old-fashioned sign of division \div in the text, but in the more technical notes the now generally adopted sloping line, as thus, A/B .

² Cp. above, p. 442.

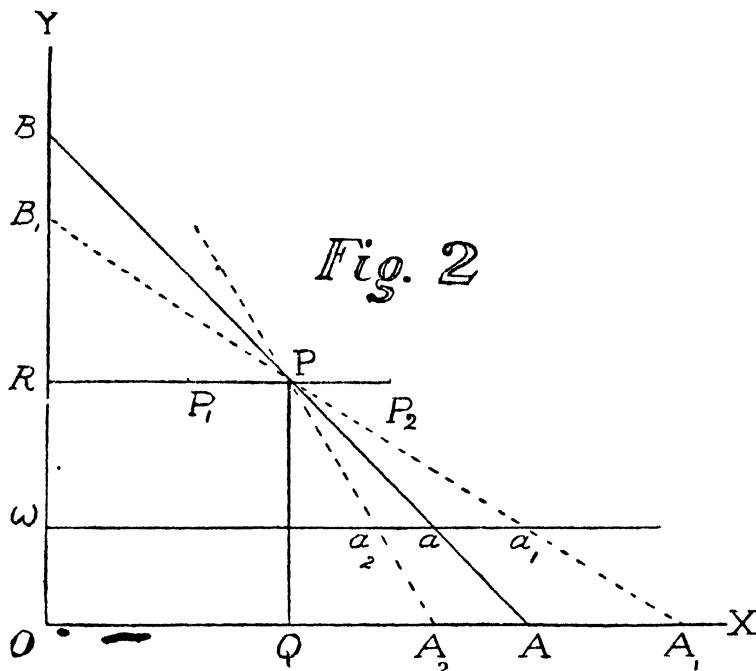
³ As follows from the condition that the line representing a demand-curve must be inclined negatively to the axis of x .

The apprehension of the general theorem may be facilitated by assigning a particular numerical value to β . Let us assign a value which is neither very great, nor very small, namely, $\frac{1}{3}$ (0.2).

$$\xi_1 = -1.2\eta_1; \quad \xi_2 = -0.8\eta_2.$$

Now the gain of the monopolist through discrimination, say R , being the difference between his profit after the discrimination and what it was before

$$\begin{aligned} &= x_1y_1 + x_2y_2 - 2ab. \\ &= ab(\eta_1 + \xi_1 + \eta_1\xi_1) + ab(\eta_2 + \xi_2 + \eta_2\xi_2). \end{aligned}$$



Substituting for ξ_1 and ξ_2 their respective values in terms of η_1 η_2 we have

$$R = ab(-0.2\eta_1 - 1.2\eta_1^2 + 0.2\eta_2 - 0.8\eta_2^2).$$

Thus the relation between (changes η) prices, which afford the same profit, the locus of constant revenue, is given by equating the expression within the brackets to a constant. This locus is an ellipse, which when $R=0$ passes through the origin from which ξ and η may be measured (on rectangular axes). In Fig. 2 O represents this origin, and the curve $OAHB$ is supposed to fulfil the condition

$$1.2\eta_1^2 + 0.8\eta_2^2 + 0.2\eta_1 - 0.2\eta_2 = 0.$$

Likewise the locus of constant Consumers' Surplus is found from first principles to be an ellipse with equation

$$\frac{1}{2}1\cdot2\eta_1^2 + \frac{1}{2}0\cdot8\eta_2^2 - \eta_1 - \eta_2 = \text{constant}.$$

In the figure the curve *OSH* represents the case in which the said constant is zero, the locus of null gain to the consumers through discrimination.

When the constant in the last written equation is positive, the curve of Consumers' Surplus lies below and to the left of *OSH*. Consider in particular the curve of this family passing through *T*, on the supposition that the point *T* represents the (lower, identical) prices which would prevail, other things being equal, if the *régime* were one of competition not monopoly. It is quite possible that this curve (not shown in the figure) should cut the locus of null monopoly profit, the ellipse *OAHB*. There will then be intercepted between these two curves an area any point in which represents a pair of prices which fulfil the secondary part of our first thesis.

The range of variations in price, from *O* the position before discrimination, that are advantageous both to the monopolist and his customers is represented by the space intercepted between the curves *OSH* and *OAH*. The point *H* may be described as the limit of the range and the index of its extent, if it is understood not to mean that the direct path from *O* to *H* can be travelled concurrently, with mutual advantage, by both parties. So the Pillars of Hercules are described by a geographical writer as the limit up to which the navigation of the early Mediterranean peoples extended; though a people situate like the ancient inhabitants of Marseilles could not sail in a straight line to that limit, but must hug a curvilinear shore (that of Spain) comparable with our curve *OSH*.

The index thus defined is found¹ to be the point of which the abscissa (η_1) is $-0\cdot1855\ldots$, and the ordinate (η_2), $+0\cdot2268\ldots$; corresponding to prices relatively 18·55 per cent. lower and 22·68 per cent. higher than the prices prior to the discrimination. There is thus a considerable range of variation; considerably greater, as will presently appear, than that which corresponds to the monopolist's maximum profit. Thus the first thesis is amply verified.

Going on to the second thesis, we have first to determine the prices which render the monopolist's profit a maximum. They

¹ The calculation is facilitated by the incident that the intersection of the two curves is also the intersection of either of them with the line $\eta_1(1 + \frac{1}{2}\beta) + \eta_2(1 - \frac{1}{2}\beta) = 0$.

prove to be $\eta_1 = -\frac{1}{12}$, $\eta_2 = +\frac{1}{8}$.¹ We have now to observe how the Consumers' Surplus is affected by the adoption of these prices. Substituting the values of η_1 and η_2 in S , the expression for the consumers' gain by the discrimination, we find the gain to be *negative*, namely $-\frac{1}{32}$. The *sign* of this quantity is all that is required to fulfil the second thesis; but it is interesting to notice that the *amount* of loss is considerably greater² than the amount of the monopolist's gain, viz., $\frac{1}{48}$ (that is, a gain of more than 2 per cent. upon his profits before the discrimination).

To verify the third thesis, we have to compare the maximum monopoly revenue, R' , as above determined, the *absolute* maximum as it may be called, with the *relative* maximum, which is the greatest possible gain to the monopolist consistent with the condition that there should be no loss to the consumer. The required positions may be explored by means of the theorem³ that the maximum monopoly revenue *relative* to, or limited by, the condition that the Consumers' Surplus should have any assigned value is realised by a system of prices such that the elasticity⁴ is the same for each of the demand-curves. In the simple case before us, the locus of equal elasticity is a right line inclined to the axis x at an angle of which the tangent is $\frac{3}{2}$,⁵ and passing through the point R , the line ERE' in Fig. 2. Thus we have only to determine the intersection of this line with the curve of null gain to the consumers. Let θ_1 and θ_2 be the respective differences between the known co-ordinates of R , η'_1 , η'_2 , and the sought co-ordinates of the point of intersection S , say η''_1 and η''_2 . Substituting in the expression for S for η_1 , $-\frac{1}{12} + \theta_1$ and for η_2 , $+\frac{1}{8} + \theta_2$, and then putting $\theta_2 = \frac{3}{2}\theta_1$, we obtain for θ_1 a quadratic equation of which I find the root to be -0.014067 . The corresponding value for θ_2 is $+0.01726$. Whence we obtain for η''_1 , -0.09740 and for η''_2 , $+0.10774$. Substituting these values for η_1 and η_2 in the general expression for R , I find for the new value of R , R'' , as we may call it, 0.02035 . This is to be compared with R' , the absolute maximum, namely $\frac{1}{48}$, or 0.02083 . The difference between R' and R'' is very small, namely, 0.00048 ; about 2.3 per cent. of R' . That is the proportion of the

¹ Differentiating R with respect both to η_1 and η_2 , and observing that the second term of variation is negative.

² In absolute quantity.

³ See NOTE at the end.

⁴ The elasticity *proper*, referred to on a preceding page (*ante* p. 290).

⁵ In general $\frac{1+\beta}{1-\beta} \div \frac{1+\frac{1}{2}\beta}{1-\frac{1}{2}\beta}$.

monopolist's maximum profit which is dependent on the Consumers' loss—a very small proportion in accordance with our third thesis.

When, other things being the same, we suppose the extent of discrimination as measured by the constant β to be increased, it will be observed that the first and the second theses continue to hold good. But the subordination predicated by the third thesis becomes less and less; though it retains some significance for values of β much greater than that which we have considered—say up to $\frac{1}{2}$. To illustrate the failure of the third thesis (while the first and second are eminently fulfilled) put $\beta=1$. Proceeding as before, I find for R' now 0·8, for $R' - R''$ 0·1205; the latter more than 15 per cent. of the former.

The case which has been considered in which the demand-curves with which we are concerned are straight lines may be regarded as a *Lemma*, which forms a convenient introduction to the far more typical case in which the curves are of the second degree, to wit, parabolas. One obvious difference between the type and the Lemma is the incident that whereas before in the expression for R and S there occurred only *squares* (and first powers) of the variables (η_1 and η_2), there now occur *cubes* of those quantities. But this difference is not from the present point of view the essential one; since the η 's are supposed to be so small, or at least so far from great, that their *third* powers may be, I will not say “neglected,” but *subordinated*, in comparison with the second powers. It is a more essential circumstance that the coefficient of the second powers in the expression for R now takes on different values, depending on a certain coefficient which is of great significance in the theory of monopoly.¹

Still facilitating the acceptance of general truth by a particular example, let us suppose that the demand-curve for $2x$ ($=x_1+x_2$) prior to discrimination is a parabola of the kind sometimes called horizontal; so that x is of the form $A - By^2$ (A and B both positive). If as before we express the coefficients in terms of the values of x and y , for which xy is a maximum, we have

$$\frac{x}{a} = \frac{3}{2} - \frac{1}{2} \left(\frac{y}{b} \right)^2.$$

Whence, if as before $x=a(1+\xi)$, $y=b(1+\eta)$,

$$\xi = -(\eta + \frac{1}{2}\eta^2)$$

$$\xi_1 = -1\cdot2(\eta_1 + \frac{1}{2}\eta_1^2); \quad \xi_2 = -0\cdot8(\eta_1 + \frac{1}{2}\eta_1^2).$$

¹ The coefficient ω , as to which see the final NOTE. If the equation to the typical parabola is $\xi = \epsilon - \eta - \lambda\eta^2$, the coefficient of η^2 in R , viz., $-(1+\lambda)$, $= -\frac{1}{2}\omega$.

Proceeding as before, we shall now find

$$R = -2\eta_1 - 1.8\eta_1^2 - 0.6\eta_1^3 + 0.2\eta_2 - 1.2\eta_2^2 - 0.4\eta_2^3$$

$$S = -\eta_1 + 0.6\eta_1^2 + 0.2\eta_1^3 - \eta_2 + 0.4\eta_2^2 + 0.13\eta_2^3.$$

The intersection of these curves forms the limit to the range of prices advantageous to both parties. If we leave out of account the terms in R and S which involve *third* powers of the η 's, we may proceed as before to find the co-ordinates H_1 and H_2 of the intersection. They are respectively 0.127 and 0.145;¹ of the same order as the true values obtained by taking into account the third powers of the variables, namely, 0.1258 and 0.1429 respectively.

The values of H_1 and H_2 prove to be in this instance, as in the Lemma, considerably greater, roughly speaking about double those of η'_1 and η'_2 , the co ordinates which represent the prices affording maximum profit to the monopolist. For these I find :

By the summary method,

$$\eta'_1 = -0.05, \eta'_2 = +0.083;$$

Taking account of the subordinate cubic terms,

$$\eta'_1 = -0.05719, \eta'_2 = 0.08012.$$

Whether calculated by the true or the approximate method, the values of R' , the monopolist's maximum gain by discrimination, and S' , the consequent loss to the customers, prove to be much the same; and accordingly the relation between them not materially different. As thus :—

	R'	$-S'$	$S' \div R'$
Approximate	0.01388	0.02315	1.667
Accurate ...	0.01378	0.02222	1.612

The approximate calculation may evidently be trusted as a verification of the second thesis.

Going on to the third thesis, I find approximately after the manner of the Lemma, for the prices which make the monopolist's profit a maximum subject to the conditions that the customer is not a loser (or gain α),

$$\eta_1'' = \eta_1' - 0.010044, \eta_2'' = \eta_2' - \frac{2}{3}\frac{1}{8} = 0.010044$$

where η'_1 and η'_2 have the approximate values above found, namely, 0.05 and 0.083 respectively. Whence it is deducible that the gain which the monopolist must forgo in order not to occasion

¹ The calculation of the co-ordinates is facilitated by the circumstance that the point of intersection between the curves lies on the straight line $8\eta_1 + 7\eta_2 = 0$. It happens (in this particular example) that this convenient proposition holds good for the true curves, including the cubic terms, as well as of the curves truncated by the omission of those terms.

loss to his customers is about '0004, about 3 per cent. of the absolute maximum (above stated). To compare the true result with this approximate one would require a very laborious calculation. The following partial test must suffice. Assign to the ordinate η_2 a value less than that which affords the (true) maximum profit by an amount which the approximate investigation suggests; for example, put $\eta''_2 = 0.07$, less than $\eta'_2 (= 0.08012)$ by about 0.01. Now find that abscissa of the curve $S=O$ (roughly as to the general shape of that portion with which we are concerned illustrated by the curve OSH in Fig. 2), for which the ordinate 0.07. That abscissa is found to be -0.06548 . Accordingly, $+0.07$ and -0.06548 represent prices for which the consumer's loss is null. But the gain which the monopolist forgoes by the adoption of those prices, say η''_1, η''_2 instead of η'_1, η'_2 , is found (by substituting those values in the expression for R) to be a small percentage of R' , namely, about 2 per cent. But that percentage, small as it is, exceeds the true percentage which would be obtained by using the true η'_1 and η'_2 instead of the assumed or "trial" values.

The peculiar interest of this example is that it is typical of an immense variety of demand-curves, or *functions* representing x , the amount demanded in terms of y , the price.¹ Very generally,

¹ The essence of the general reasoning may be indicated as follows. In the notation above employed we have for R , the gain of the monopolist through discrimination (cp. note to p. 450 above)

$$(1 + \xi_1)(1 + \eta_1) - 1, + (1 + \xi_2)(1 + \eta_2) - 1 ; \\ = -\beta\eta_1 - (1 + \beta)\frac{1}{2}\omega\eta_1^2 \dots, + \beta\eta_2 - (1 - \beta)\frac{1}{2}\omega\eta_2^2 \dots ;$$

the dots indicating omission of terms involving higher powers. Whence for the prices affording maximum profit we have

$$\eta_1' = \frac{\beta}{(1 + \beta)\omega}, \quad \eta_2' = \frac{\beta}{(1 - \beta)\omega}.$$

Also the gain of the customers by discrimination

$$= -\eta_1 - \int_0^{\eta_1} \xi_1 d\eta_1, \quad -\eta_2 - \int_0^{\eta_2} \xi_2 d\eta_2 \\ = -\eta_1 + \frac{1}{2}(1 + \beta)\eta_1^2 \dots, \quad -\eta_2 + \frac{1}{2}(1 - \beta)\eta_2^2 \dots$$

Substituting in the expression for S the above-written values for η'_1, η'_2 , we obtain for S' the gain of the customers through discrimination

$$= \frac{2\beta^2}{\omega(1 - \beta^2)} \left\{ 1 - \frac{1}{2} \frac{1}{\omega} \right\}$$

Which will be negative in accordance with the second thesis, unless ω is small, $< \frac{1}{2}$.

To prove the third thesis consider R and S as functions of θ_1, θ_2 , where $\theta_1 = \eta_1 - \eta'_1, \theta_2 = \eta_2 - \eta'_2$. Then the position of relative maximum as above defined must lie on the locus of common tangents to curves of the respective families $R = \text{const.}, S = \text{const.}$; that is

$$\frac{dR}{d\theta_1} / \frac{dR}{d\theta_2} = \frac{dS}{d\theta_1} / \frac{dS}{d\theta_2}.$$

Whence we obtain (R not involving the first powers of the θ 's) $\theta_2 = q\theta_1 \dots$, where

in virtue of presumptions above enunciated,¹ such a function may be expanded in ascending powers of y of the type

$$A + By + My^2, + Ny^3 \dots,$$

with a coefficient M of such an order of magnitude in comparison with subsequent coefficients that, y being a small fraction, the first three terms of the expansion afford an approximation to the value of the function that is adequate for purposes like the present one. If a thesis like ours, not demanding numerical precision, is true of this approximation to the function, it is probably also roughly true of the function itself.

Of course, it must be presumed that the functions with which we are concerned are of an ordinary character—not discontinuous or otherwise abnormal. For example, suppose one of our demand-curves to have the following extraordinary form. Ascending from zero price the locus is a vertical line, say as far as P —it is the perpendicular from P on the abscissa—in Fig. 2. From P the locus is a horizontal line, the perpendicular from P on the ordinate. In this peculiar case our first thesis would be fulfilled; all the better, as there is avoided all *dead loss*—*perte sèche* in M. Colson's phrase—that is loss to the consumers, which is not gain to the monopolist. Also our second thesis would be eminently fulfilled; for it would be in the power of the monopolist now to charge prices (b_1 and b_2) by which not only one group of customers, but both groups, would have a bad bargain: Consumers' Surplus being theoretically zero or practically only just above it. But our third thesis in this peculiar case would fail altogether. Peculiar as it may seem, this example is not essentially different from one which is at least suggested by very high authority—the Dupuit-Colson type referred to on a previous page,² if the attributes there designated α and β are supposed predicable in their strictest form. We are presented with the conception of the area within the demand-curve resolvable into a series of separate columns—as it were so many sacks standing upright, each of which the monopolist can deplete down to any point which it pleases him to fix.³

η is a coefficient of the order unity. Substitute this value of θ_2 for θ_1 in the equation to zero of S , which is of the form

$$S' - A\theta_1 - B\theta_2 \dots,$$

where S' is of the order β^2 , A and B are of the order unity; we find the required value of θ_1 and therefore θ_2 to be of the order of β^2 . But R is of the form $R' - (1 + \beta)\omega\theta_1^2 - (1 - \beta)\omega\theta_2^2 \dots$. Therefore $R' - R''$ (the difference between the absolute and the relative maximum profit) is of the order β raised to the fourth power.

¹ *Ante*, p. 285.

² Above, p. 443.

³ As I interpret, there is supposed to be reached a stage of analysis at which the ordinary properties of a demand-curve break down; much as the soap-bubble breaks

To return to probable matter, if the discrimination is not so complete as to suspend the ordinary properties of demand-curves, the theory above propounded may be considered as evident *à priori* in our sense of the term. Accordingly it does not stand in need of specific verification. Nevertheless, as even in mathematics seeing is believing, as the temperament of Didymus is prevalent among those whom I wish to persuade, I have thought it worth while to verify my theory by showing that it holds good for several different laws of demand. For this purpose I select four functions which are in very common use throughout applied mathematics.¹ There is first (A) the one most used and most useful of all, to evaluate which requires only the operations of arithmetic up to and including *Involution*; in short, the parabola—the common parabola, if no higher power than the second occurs. An example of this law has already been given. But it may be well to consider a second example of a variety less favourable to our (third) thesis.² Next (B) we shall place a function which requires *Evolution* so far as the extraction of the *square root*. Next comes

when the tenuity of the film approaches the dimensions of the constituent molecules. The distinguished economists who entertain this conception are aware of the impossibility of perfectly realising it in practice (cp. Dupuit, *Annales des Ponts et Chaussées*, 1842, vol. i, p. 222; Colson, *Cours*, vol. vi, p. 38. Cp. p. 227, par. 2).

¹ The following table exhibits the functions which are employed in two forms: the first referred to the zero of commodity and the zero of price as origin, and abbreviated by putting x for x/a , where x is any amount of commodity and a is that amount of which the sale affords maximum profit to the monopolist, and likewise putting y for y/b (cp. above, p. 446, pars. 1, 3). For the secondary form of the functions the point of which the co-ordinates are $x=1$ $y=1$ is taken as the origin and the co-ordinates are respectively

$$\xi \equiv x - 1 (\equiv (x - a)/a)$$

$$\eta \equiv y - 1 (\equiv (y - b)/b).$$

There is added in a third column a coefficient corresponding to M in the immediate context (to ω in the final NOTE), a coefficient which must be positive and is presumably not a very small fraction.

	x.	ξ.	$\frac{1}{2}\omega.$
A	$\frac{1}{4}(3-y)^2$	$-\eta + \frac{1}{4}\eta^2$	$\frac{2}{3}$
B	$\sqrt{3-2y}$	$\sqrt{1-2\eta} - 1$	$\frac{2}{3}$
C	$-\log y/e$	$-\log(1+\eta)$	$\frac{1}{2}$
D	e^{1-y}	$e^{-\eta} - 1$	$\frac{1}{2}$

² Cp. the final NOTE.

(C) a function which is of wide application in physics, and even in economics has been frequently employed,¹ the *logarithm*. Then follows (D) the nearly related function, which is sometimes called the *anti-logarithm*.² I have experimented on these functions in the following uniform manner. I take a curve of the kind under consideration to represent the *average* law of demand, the *half* of the amount demanded at any assigned price, of both species of the commodity. To represent the demands separated by discrimination, I suppose this curve to be thus disturbed, or strained. To the value of x at any price, y , there is added the quantity $\beta(x-a)$ to constitute x_1 , the demand for one species at that price; and from the value of x there is subtracted the quantity $\beta(x-a)$; where, as before, β is a (not large) proper fraction, a is the amount of commodity sold and β the price which affords maximum profit to the monopolist prior to discrimination. (The enunciation applies primarily to the tract of curve for which x is larger than a ; for the tract beyond that point we may read $a-x$ for $x-a$, and interchange the words "addition" and "subtraction.") The fraction β is in each case determined so as to render the increase of the price that is raised equal to $12\frac{1}{2}$ per cent. of the original price.³ I now determine an index of the range of prices that are mutually advantageous—those Pillars of Hercules, up to which, as explained with reference to our Lemma, the two parties can travel concurrently. Only it is not always convenient to find the actual position of the Straits; it suffices to find a point, as it were, on the African shore, as in example A, or even as in the other examples, a rock at some distance from that shore, on the Mediterranean side of the Straits. The limits so understood are given in the first column of the subjoined table. I then determine the prices which make the monopolist's profit a maximum, the (money-measure of) loss to the customers by the adoption of those prices, and compare the amount of that loss to the amount of the monopolist's profit when maximised. The percentage given by that comparison forms the entry in the second column. Further, I find a pair of prices which, while not causing any loss to the customers, yet require the monopolist to forgo only a very small quantity of his (possible maximum) profits. This amount thus forgone, as a percentage of the total profit

¹ To represent the law of diminishing returns and the law of diminishing utility.

² The Napierian logarithm, being the ordinary logarithm multiplied by the constant 0.434. . .

³ It might have been somewhat more elegant, but it would have been considerably more troublesome, to assign the coefficient β (as in the treatment of the Lemma) and thence compute both the changes of price. .

obtained by discrimination, forms the entry in the third column.

Though I have expended much labour on these calculations, yet, as they are long and delicate, I can hardly hope to have entirely avoided mistakes. Especially the decimals in the Table here following and the final and penultimate places of the decimal in the Table of Materials given in the Notes, are open to suspicion. But I am sure that the computation is quite accurate enough to verify propositions in Probabilities.

Table¹ showing verifications of the three theses :—

(1) Changes of price advantageous to both parties; per cent. of the price before discrimination.

Law of Demand.	1		2	3
	-	+		
A	18.5	22.3	201	2.5
B	18	22	98	2.5
C	18	22	200.5	1.15
D	20	24	309	1.7

¹ The subjoined table presents the materials from which the table in the text is constructed, namely,

β , the coefficient of discrimination ;

$(-H_1, +H_2)$ changes of price advantageous to both parties ;

$(-\eta'_1, \eta'_2)$ prices rendering the monopolist's gain by discrimination a maximum ;

R' , the monopolist's gain by discrimination when a maximum ;

$-S'$, the loss to the customers by discrimination when the monopolist's profit is a maximum ;

$(-\eta''_1, \eta''_2)$, prices in the neighbourhood of $(-\eta'_1, \eta'_2)$ at which the customers are neither gainers nor losers ;

R'' , the monopolist's gain by discrimination when the prices are $(-\eta''_1, \eta''_2)$.

The prices are relative to the prices before discrimination ; the gains (and losses) are relative to the monopolist's profit before discrimination.

Designation of function.	β .	$-H_1$.	H_2 .	$-\eta'_1$.	η'_2 .	$-S'$.	R' .	$-\eta''_1$.	η''_2 .	R'' .
A	0.149502	0.1856	0.2228	0.08324	0.125	0.08109	0.01547	0.0952	0.105	0.01508
B	0.30217	0.18	0.22	0.08356	0.125	0.08189	0.03218	0.095	0.105	0.03184
C	0.0658199	0.18	0.22	0.090918	0.125	0.0227	0.01132	0.099	0.11	0.01119
D	0.099883	0.2	0.24	0.08816	0.125	0.08117	0.01007	0.1082	0.115	0.0099

(2) Loss to the customers by discrimination when the monopolist's gain thereby is a maximum; per cent. of the monopolist's maximum profit.

(3) Percentage of maximum profit resigned by the monopolist to avoid loss to the customers by discrimination.

The table in the text is thus formed out of the materials.

Column 1 shows H_1 and H_2 each multiplied by 100.

Column 2 shows $-S'/R'$, multiplied by 100.

Column 3 shows $(R' - R'')/R'$, multiplied by 100.

Is this multiplication of tests like using several triangles of different shapes in order to prove one of Euclid's propositions relating to triangles in general? Or, rather, have we made a contribution towards ascertaining by induction, less roughly than is given by *a priori* evidence, a limit up to which for purposes like ours fractions may be treated as *small*?¹

Having secured this central position, we can now easily extend the territory subject to our laws; removing limitations by which it has hitherto been circumscribed.

So far we have supposed that prior to discrimination the two categories of consumers were equally important to the monopolist, the amount demanded by each at the single price being the same. Now let us recall this assumption; and, beginning with the Lemma, suppose that at the price b ($=PQ$ in Fig. 2) the amount demanded by one group of consumers is $a(1 + \alpha)$, while the amount of the other species demanded is $a(1 - \alpha)$. The first demand corresponds to RP_2 in the figure if α is positive, the second to RP_1 ($P_1P = PP_2 = a\alpha = \alpha$, if $a = 1$). If the specific demand-curves consisted respectively of the lines joining B to P_1 and P_2 (and produced) there would be no discrimination; the two new prices would be identical with the old price, b . But we are to suppose that the dotted lines—not now passing both through P , but one through P_1 another through P_2 —are so inclined as to cause a dissimile of prices when the constraining condition that there should be only one price for the whole class is removed. Is it now probable that the consumers as a whole will suffer by the

¹ Compare Mr. Bickerdike's observation with reference to his theory of "incipient taxes" (ECONOMIC JOURNAL, 1907, p. 101), "Rather strong assumptions have to be made as to the elasticity of foreign demand and supply if the rate of the tax affording maximum advantage is to come below ten per cent."

As I understand (cp. ECONOMIC JOURNAL XVIII, p. 399 *et seq.*), the quantity with which the writer is concerned, the net gain to the home country consequent upon a small customs-duty, takes the form $Lx - Mx^2 \dots$; where L is proportionate to the amount of commodity taxed, x is the rate of taxation per unit of commodity; M is such a coefficient as the M described in our text. Or as L must be considered as varying with x —say $L' - Nx \dots$, we may write the quantity under consideration $L' - M'x^2$ ($M' = M + N$). The value for which this expression is a *maximum* (approximately $\frac{1}{2}L'/M'$) is probably much smaller than the limit up to which the expression is positive.

monopolist's using his power of discrimination so as to make his profits a maximum?

Common-sense will perhaps prejudice this question; pointing to instances in which a railway manager may afford a special rate to exceptional classes of travellers (excursionists and so forth). If the general scale of rates is not disturbed by the favour granted to the occasional passengers, if the one species is advantaged and the other is not affected, there must result advantage to the class as a whole.

Doubtless, I reply, in the extreme case of inequality where the demand of the class favoured by discrimination was so small prior to the discrimination as not sensibly to affect the rates fixed for other classes; for instance, the demand of the workmen for the use of the foot-bridge in the second of the illustrations above cited from Dupuit.¹ But we are not now considering extreme² cases, but cases in which α —the measure of inequality—is a proper fraction and primarily at least a small one. For instance, in the first of Dupuit's illustrations, suppose (what was, perhaps, not his meaning) that of the ten hectolitres of water which are demanded when the (single, undiscriminated) price is 10 francs per hectolitre per annum, six are required for *internal* use and four for *external* use;³ and that both demands expand when price falls. In such a case are the consumers as a whole likely to suffer by discrimination? The answer given by mathematics to a question in the theory of Monopoly is often not that which is expected by common-sense.

As before, let us put ξ_1 , ξ_2 for the proportional or relative changes in demand respectively consequent on the relative changes of price η_1 and η_2 . Then we may write

$$\begin{aligned}\xi_1 &= -\alpha - (1 - \alpha + \beta)\eta_1, \\ \xi_2 &= +\alpha - (1 + \alpha - \beta)\eta_1;\end{aligned}$$

simpliciter in the case of the Lemma, or with the addition of terms involving second powers of the η 's to fit the more general type. Forming the general expressions for the Monopoly Revenue and the Consumers' Surplus we find that, as long as α and β remain small fractions, the triple thesis is fulfilled nearly as well as when we dealt with β only. Now, likewise, as either of the coefficients becomes large, the second thesis, that the monopolist tends to fix a set of prices prejudicial to the customers, ceases to be qualified by the third thesis, that his interest in their detriment is small.⁴ The second hypothesis retains some

¹ Cp. above, p. 442.

² Cp. ante p. 284 *et seq.*

³ Above, p. 441.

⁴ See observations on the Lemma above, p. 450, par. 2.

probability even when the coefficients are considerable; in the absence of knowledge that the forms of the functions with which we have to deal—the higher powers of the variables which now come into play—are unfavourable to the thesis. We are, of course, here, as throughout, contemplating the money-measure of Consumers' Surplus; not taking into account that the consumers on a small scale may be the poor and needy.

If it is given that α is very large (nearly unity) then the exception¹ enounced in connection with Thesis 2 occurs. But if nothing is given about the coefficients, then we may still affirm the thesis in a certain *a priori* sense.² No doubt this kind of probability is not so useful as that which obtains when it is given that conditions favourable to the theses, such as the smallness of both α and β , are realised in the particular case with which we have to deal.

These considerations are readily extended to the general case.³

A further extension of our laws is effected by removing the condition that the commodities in which the monopolist deals should be, like the mineral waters in Cournot's classical illustration, unaffected by cost of production. First, let us make the simplest supposition, that there is a uniform cost of production for all articles of the class considered without regard to the species into which it may be discriminated, or to the total amount produced. This simple case may be represented by measuring in Fig. 2 the net price on which the monopolist's profits are calculated, no longer from the abscissa, but from a horizontal line at a distance from the abscissa, say $O\omega$, which represents the cost of production per unit.⁴ The position of maximum profit (prior to discrimination) will now be given by bisecting $\omega\alpha$ and $\omega\beta$, instead of OA and OB . The units of the system being the same as before, the price and amount will not now be each unity. Or if we take the new price and the new amount as the units (in which lengths on

¹ This exception deserved to be specified on account of its importance in practice; the attribute by which it is defined—the ratio between the amounts demanded before discrimination—being commonly capable of identification. Theoretically, other exceptions have a right to be enounced; for instance, the case when β is (known to be) large, or γ (below note 3), or ω small (final NOTE).

² Compare the argument employed in the ECONOMIC JOURNAL, 1908, p. 551.

³ In general there may be any number of coefficients of discrimination in addition to the α and β which have been introduced. Prior to discrimination let

$$\xi (=x/(a-1)) = -\eta + \lambda\eta^2 + \mu\eta^3 + \nu\eta^4 \dots$$

After discrimination

$$\begin{aligned}\xi_1 &= \pm \alpha - (1 \pm \beta)\eta_1 + (1 \pm \gamma)\lambda\eta_1^2 + (1 \pm \delta)\mu\eta_1^3 \dots; \\ \xi_2 &= \mp \alpha - (1 \mp \beta)\eta_2 + (1 \mp \gamma)\lambda\eta_2^2 + (1 \mp \delta)\mu\eta_2^3 \dots\end{aligned}$$

M. Colson employs largely an equivalent construction.

the axes are respectively measured), the demand-curve referred to the new position of maximum as origin is no longer $\xi = -\eta$, but $\xi = -q\eta$, where q is a coefficient greater than unity.¹ The essential character of the reasoning is not altered by the modification of the data. Nor is that character altered when, instead of $k_1x_1 + k_2x_2$, representing the total cost of producing the quantities of the specific commodities x_1 and x_2 , at the respective rates per unit k_1 and k_2 , we have to add a term such as $\pm l_1x_1^2 \pm l_2x_2^2$;² where the positive sign corresponds to the *law of diminishing returns*, the negative sign to the *law of increasing returns*; nor when we add a term such as $-l_{12}xy$,³ corresponding to *joint cost*.⁴

The reader will observe what a subsidiary rôle is here assigned to *joint cost*; which some distinguished writers on Railway Economics seem to emphasise as the principal cause of discrimination. Joint cost is no doubt favourable to discrimination; but there is a more essential condition, unity of management, monopoly.⁵

A further extension is effected by removing the condition that the specific demands should be uncorrelated. The character of the reasoning is not essentially altered by this alteration in the data. The principal difference in the result may thus be expressed. Whereas previously the amount of profits which the monopolist must forgo in order that the customers should not lose or should even gain by discrimination was (approximately) a quantity of the form $A\theta_1^2 + B\theta_2^2$, where A and B are coefficients of the order unity (roughly speaking), θ_1 and θ_2 are of the order β^2 (β being a small, or rather not large, fraction); now there is added

¹ If k is the cost per unit in the new notation according to which the value of x and the value of q which afford a maximum under the new circumstances are now taken as units; then q may be deduced from the condition that $(1 + \frac{1}{q}\xi + \eta) - k(1 + \xi) = (1 - k) + \eta - q\eta - q\eta^2 + kq\eta$, should be a maximum when $\xi = 0$, $\eta = 0$. Whence it is deducible that $q = 1/(1 - k)$.

² The " l 's," as well as the " k 's," being positive.

³ l_{12} being positive. The proposition is, of course, equally true when this coefficient is negative; that is, in the less frequently specified case of rival production (cp. ECONOMIC JOURNAL, vol. vii, p. 51, par. 1).

⁴ Nor when higher powers of the variables occur; with the usual assumptions as to the magnitude of their coefficients.

⁵ It may be objected that discrimination arises without monopoly in the case of large establishments; for instance, when an hotelkeeper discriminates between wines of different species, though his profits are subject to competition with other hotelkeepers. But I submit that he can practise discrimination just because he enjoys a certain degree of monopoly. If the wines were sold separately by open competition, if there was on the spot a sherry-market and a port-market, the prices paid by the customers would each of them—instead of as now on an average, summed up in the hotel-bill—conform to the cost of production.

to this expression a new term of the same order as the others, $C\theta_1\theta_2$.¹

I need not point out in detail that most of the propositions above predicated of the Lemma and the simple type are true of the generalised conditions. Enough has been said to show that these propositions hold good through a wide range of circumstances, with as much truth as can be expected of a theory which belongs at once to Mathematical Economics and to the Calculus of Probabilities. Indeed, I am disposed to claim for the theory a greater degree of practical importance than can generally be ascribed to those branches of study.

Mathematical economics serve generally to present comprehensive views as to the interdependence of variable quantities, rather than to solve particular problems; as Professor Pareto has

¹ Let us begin with the simple case of linear laws of demand, amounts of the two species demanded before discrimination equal, and no cost of production. Let x_1, y_1 denote the quantities demanded after discrimination at the prices y_1, y_2 ; and let $x_1 = x_1/a, y_1 = y_1/b, x_2 = x_2/a, y_2 = y_2/b$, where b is the price before discrimination and a , half the quantity demanded at that price. We have now x_1 , and likewise x_2 , a linear function of both the y 's. As thus:

$$x_1 = p_1 - q_1 y_1 - r_1 y_2; \quad x_2 = p_2 - q_2 y_2 - r_2 y_1.$$

These coefficients are subject to certain conditions. The expressions for y_1 in terms of x_1 and x_2 , and likewise for y_2 , must be such that

$$y_1 = \frac{dU}{dx_1}, \quad y_2 = \frac{dU}{dx_2};$$

where U is a function of x_1, x_2 representing (the money-value of) the utility obtained from the consumption of the quantities of commodity x_1, x_2 . Whence it is deducible that $r_1 = r_2 =$, say, ρ . If now we put $x_1 = 1 + \xi_1, x_2 = 1 + \xi_2, y_1 = 1 + \eta_1, y_2 = 1 + \eta_2$, we have

$$\xi_1 = -q_1 \eta_1 - \rho \eta_2$$

$$\xi_2 = -\rho \eta_1 - q_2 \eta_2.$$

Whence

$$R = x_1 y_1 - 1 + x_2 y_2 - 1, \\ = \eta_1(1 - q_1 - \rho) + \eta_2(1 - q_2 - \rho) + \xi_1 \eta_1 + \xi_2 \eta_2.$$

Now since η_1 is constrained to be equal to η_2 , that is before discrimination when there is only one price for both species of commodity, say, $1 + \eta$, we know by construction that R is a maximum when $\eta = 0$. Equating the coefficient of η to zero, we have $2 - (q_1 + q_2) - 2\rho = 0$; $q_1 + q_2 = 2 - 2\rho$; say, $q_1 = 1 + \beta - \rho, q_2 = 1 - \beta - \rho$.

Substituting the equivalents for q_1 and q_2 in the above-written expression for ξ_1, ξ_2 , we have now to determine the values of η_1 and η_2 for which R is a maximum. They prove to be $\eta'_1 = -\frac{1}{2}\beta(1 - \beta)/\Delta, \eta'_2 = +\frac{1}{2}\beta(1 + \beta)/\Delta$; where $\Delta = 1 - \beta^2 - 2\rho$. (The corresponding values for ξ are as in the simple case, $\xi'_1 = \frac{1}{2}\beta, \xi'_2 = -\frac{1}{2}\beta$.) These values are now to be substituted in the expression for S , that is the difference between the consumer's surplus as it is after discrimination and as it was before, that is the difference between $U - x_1 y_1 - x_2 y_2$, as it is when we put for the x 's and y 's their values in term of the ξ 's and η 's ($x_1 = 1 + \xi_1$, etc.), and what it becomes when we put for each of x 's and y 's *unity*. Substituting and reducing we have the expression for S in terms of the ξ 's and η 's. Substitute in this expression the above-written values of η'_1 and η'_2 (ξ'_1 and ξ'_2), and there results as before the value of S' proportional to the *second* power of β . The reasoning may thence be pursued on the lines traced in the note to the typical case (above, p. 452).

recently pointed out in this JOURNAL.¹ But I submit that there is an exception to this general limitation; that mathematics play a more direct part in the theory of monopoly. What if an exception should be formed by the application of the preceding theorems to one of the doctrines propounded by Professor Pareto himself—not certainly a particular problem, yet a general view which purports to be of direct practical significance. I refer to his argument directed against Socialism, that at best it would not essentially alter the distribution and production of wealth. “Economic goods will be distributed according to the rules which we have discovered in studying a *régime* of competition. . . .” “Prices reappear,” or “will at most change their name.”² But we have seen that a regulated discrimination of prices, such as might conceivably be practised by a Socialist Directory, but is not possible in a *régime* of competition, tends to increase the sum-total of utility. A conception still less familiar to popular Socialism is suggested by what may be called the *external case* of our theory, that which is presented when “monopolist” is interpreted to mean sole *buyer*. The suggestion is that to discriminate between labourers on grounds other than efficiency—not always to pay the same wages for the same amount of work done—might diminish the “dead loss” of Producers’ Surplus which the contrary policy involves.³

But if this advantage is either of a negligible order in relation to the stupendous consequences of a Socialist revolution, or is over-balanced by the liability to enormous abuses; may we not hope for a less precarious application to a more familiar kind of monopoly, the control of railways and generally public works?⁴ That hope is justified by experience. For the mathematical principles on which our reasoning is mainly based are actually applied under the skilful direction of M. Colson to the railway policy of France. Such is the proposition that a small reduction of price, so small as to cause a very small sacrifice of profit to the monopolist, is likely to be attended with considerable relief to the customers. Our third thesis but superadds to this received proposition the following one:—In the case of discrimination (in certain not unusual circumstances) the relief to the customers afforded by a small sacrifice of the monopolist’s profits is likely to be so considerable that they will be gainers, or at least not losers, by the introduction of discrimination.

¹ In his appreciative tribute to the memory of Walras, March, 1910.

² *Cours d’Économie Politique*, p. 1014 and context.

³ Above, p. 453, *et passim*.

⁴ In the sense of the term in which it is employed by M. Colson.

It is true that these propositions are but probable; liable to failure in particular cases. But we are not altogether dependent on the more precarious kind of *a priori* probability, that which is exemplified by the predication of our second thesis¹ in the absence of data as to the extent and elasticity of demand. Such data would often be available sufficiently to show what case we had to deal with. The sum of full knowledge may illuminate part of our course. There may be enough of that daylight to enable us at least to select the proper path; which may then be pursued in safety by the starlight of Probabilities.

NOTE.—On certain coefficients. The first differential coefficient of a monopolist's profit have an interesting relation to the elasticity of his customers' demand. The former coefficient may be written, in our notation, when there is no cost of production,

$$x + y \frac{dx}{dy} = x \left(1 + \frac{y}{x} \frac{dx}{dy} \right) = x(1 - e);$$

where e is the elasticity as defined by Professor Marshall (*Principles of Economics*). When cost of production is taken into account the expression becomes $x(1 - c - e)$; where c is the cost per unit.

This proposition may be employed to prove the theorem above enounced (p. 449), that when a monopolist discriminates between different species of custom, subject to the conditions that the subtraction from (or addition to) the benefit of his customers as a whole should be nil, or have any other assigned value, the elasticity of demand is the same for the different species which are discriminated (cost of production being null or constant). For consider the Consumers' Surplus, say W , as the difference between the money-measure of the utility resulting from the consumption of the commodities, and the purchase-money thereof, we have, in the case of two species of commodity,

$$W = \int_0^x y_1 dx_1 + \int_0^x y_2 dx_2 - x_1 y_2 - x_2 y_2, = - \int_0^y x_1 dy_1 - \int_0^y x_2 dy_2.$$

Likewise the profit of the monopolist, say V , is, in the absence of cost of production, $x_1 y_1 + x_2 y_2$. Now the quantity which the monopolist aims at maximizing is $V + \lambda W$; where λ is the indeterminate coefficient proper to problems of relative maximum. We have accordingly

$$\frac{d}{dx_1} (V + \lambda W) = 0; \quad \frac{d}{dx_2} (V + \lambda W) = 0;$$

whence $e_1 = 1 - \lambda = e_2$. The proposition continues to hold good when the cost of production per unit is a constant other than zero, but loses its simplicity when the cost (per unit) involves the variables. It may be remarked that the property of equal elasticities is also characteristic of another kind of discrimination which may seem particularly suitable for a State Monopoly to practise, namely, that regulation of prices which has for its object the maximum benefit to the purchasers as a whole, consistent with the retention by the monopolist of a fixed profit—a fixed amount, or a fixed percentage of the output, that is of the cost of production, supposing cost to be constant.

¹ Above, p. 459.

The affinity between elasticity and the increment of monopoly profits extends to the second order of differentials. Putting $V=xy$ we have $\frac{1}{x} \frac{dV}{dy}$ (or is it more elegant to write $\frac{y}{V} \frac{dV}{dy}$?) $= 1 - e$ (for any value of the variable).

Accordingly, $\frac{1}{x} \frac{d^2V}{dy^2} = -\frac{de}{dy}$, at the point of maximum, since then $\frac{dV}{dy} = 0$.

This coefficient, or rather its negative, namely $\frac{de}{dy}$, is identical with our ω which, as will have been observed, plays an important rôle in the theory of monopoly. (*Mutatis mutandis* when cost of production enters.) The coefficient ω is necessarily positive and presumably not (often) very small. The smaller it is, the sooner, as we continue to increase the degree of discrimination, the extent to which prices are varied, in the limit reached at which our third thesis breaks down. Thus in the second of the two parabolas above instanced, a smaller value of η'_2 (β and $-\eta'$) will cause the third term of the expansion to become comparable with the second in the case of the second parabola, for which $\omega = \frac{3}{2}$, than in the case of the first parabola, for which $\omega = 3$.

The smallness of ω likewise causes trouble in the exemplification of the theorem that the tax on one of two monopolised articles for which the demand is correlated, may result in the fall of both prices. The range within which fractions of maximum monopoly profit may present this remarkable property is restricted by the conditions that $\omega_1, \omega_2, \omega_1 \omega_2 - \rho_2$ should each be positive. The last of these conditions was not attended to in the example given in the text (ante p. 298). There is there instanced a fall of both prices which is more profitable to the (taxed) monopolist than the maintenance or increase of the original prices. But in order to make sure that there is not a still more profitable position, at which one at least of the prices is higher than originally, there is required some additional postulate as to the form of the surface representing the monopolist's profit. We should be quite within our rights in making such an assumption—the rather as some modification of the simple algebraic functions adopted must be supposed ultimately to set in (ante p. 303, par. 2). But as remarked in a note, when it was too late to alter the text without more urgent reason—a better example would have been formed by a lower rate of taxation (p. 298). For instance, in the case supposed, let there be imposed a tax of 1s., more exactly 1s. $\frac{3}{4}$ d. per first-class ticket (theoretically 0.5157 £1, that being the tax which causes an increase of third-class passengers from 200,000 to exactly 214,000—for convenience of calculation, I started with the addition to the number of passengers, not with the rate of the tax). Then, I find, the monopolist's profits will be at a (genuine) maximum when the first-class fare (originally £1) is reduced by over $3\frac{1}{4}$ d. and the third-class fare (originally 10s.) by about the same figure.

One more coefficient calls for one more remark: elasticity, in the popular sense, that is $F'(p)$ in Cournot's notation, $\frac{dx}{dy}$ in ours. The sort

of reader who is content with this usage may be apt to think that the distinction (ante p. 290) which we have emphasised between elasticity and the increment thereof is a refinement of no great practical importance, that what is true of the increment is true enough of the quantity supposed to increase. It may be well, therefore, to point out that between the increment (first differential coefficient) of a variable and the variable itself,

there may be all the difference that there is between the velocity at which a body is moving and the distance through which it has moved. Contrast the following propositions :—(1) The higher the speed of a motor car the greater is the danger of accidents; (2) the longer the distance (from any fixed point) that a motor car has travelled (at whatever rate), the greater is the danger of accidents. The former presumption could doubtless be verified by the statistics of accidents. Governments are well advised in making regulations based on this presumption. But what should we think of an expert who advised Government to discourage motorists from travelling beyond a certain distance from, say, New York, in order to prevent accidents? That advice would be of a piece with the theory which predicates of elasticity what is true of the increment of elasticity. No doubt it may be a proof of great natural ability to approach and half discern the truth in such a matter without the aid of the appropriate mathematical conceptions.

F. Y. EDGEWORTH

MUST INVENTIONS REDUCE THE RATE OF INTEREST?

In his profound work on the *Rate of Interest*, writing of the effect of inventions, Professor Irving Fisher says :—"The effect in raising interest lasts only so long as the resulting income-stream is sufficiently distorted in time and shape to be of a decidedly ascending type . . . later, however, there will come a time when the income-stream ceases to ascend, when all the necessary investment has been completed, when no further exploitation is possible, and when it is only necessary to keep up the newly constructed capital at a constant level. When this period is reached, the after-effect of the invention will be felt. Society will then have a larger income-stream than before, but no longer an ascending one. A mere increase in the *size* of the income-stream, while its shape remains constant, has the effect, as we have seen, not of increasing, but of somewhat decreasing the rate of time-preference. Consequently the after-effect of all inventions and discoveries is not to increase but to decrease the rate of interest."¹ I shall argue that inventions and discoveries need not cause a diminution of the rate of interest ultimately.

The doctrine that time preference falls as income rises, that is to say, that the proportion of income saved at a given rate of interest rises as income rises, is derived from the proposition that when people are very poor they either cannot save or are strongly tempted to act irrationally and save insufficiently. Were it not for the disturbing effects of poverty Professor Irving Fisher would hold that time preference is

¹ *The Rate of Interest*, pp. 203-204.

independent of income. We may, therefore, proceed on the assumption that it is, and make allowances for the disturbing effects of poverty as we go on. Apart from these effects, Professor Irving Fisher holds that inventions in the long run cannot affect the rate of interest. I, on the contrary, contend that, on the evidence adduced, they are as likely to raise it or lower it as to leave it unaffected.

That invention may ultimately magnify interest is suggested by the following considerations, when we suppose, for the sake of simplicity, that money is borrowed only for productive uses. Invention may intensify or extensify demand for capital, and altogether alter the shape of the demand curve for capital. It might enormously raise the marginal utility of the amount of capital used before the invention, without appreciably affecting the utility of more initial increments of capital, and the marginal utility might remain high for much additional investment. That is to say, prior to the invention the demand for capital might have been highly inelastic just before the point of equilibrium, and the invention might have had the effect of substituting for this inelastic part of the demand curve a highly elastic curve. If we investigate this case mathematically, we shall find that the rate of interest would rise, as one would naturally suppose. The proof is furnished below.

¹ Let

i = Original rate of interest.

s = Original amount saved per annum.

s' = Additional amount saved after the invention if interest continues to be i

c = Capital used when saving is s .

c' = Additional capital used when saving is $s + s'$.

r = Annual aggregate value of c less ci .

r' = Annual aggregate value of $c + c'$ less $r + i(c + c')$.

Case I.—If income is the annual aggregate value of capital then, *ex hypothesi*

$$\frac{r + ci}{r + r' + (c + c')i} = \frac{s}{s + s'}$$

and, because the annual amount of replacement is proportional to the amount of capital invested,

$$\frac{c}{c + c'} = \frac{s}{s + s'}$$

$$\therefore r' = r \frac{c'}{c}$$

Now, as the demand curve for capital before the invention might have dropped almost vertically to the position of equilibrium when s was saved and the invention might cause it merely to approximate to the horizontal for a time instead of thus dropping, the marginal value of capital could be at the limit when $s + s'$ was saved

$$i + \frac{r'}{c'}$$

$$= i + \frac{r}{c} \quad \therefore r' = r \frac{c'}{c} \text{ (see above).}$$

And obviously, in the limiting case supposed, for the extent of investment for

Without recourse to mathematics, it will readily be seen that inventions could cause a considerable shrinkage of the rate of interest, for their effect might be to intensify the initial industrial demands for capital, and leave the marginal utility of capital less than the old rate of interest, when an amount of capital was supplied which maintained the old rate of time preference. Indeed, the rate of interest might conceivably drop to zero. It is a corollary from this reasoning that the quantity of capital used might be reduced by the adoption of new inventions. This could be guessed at once, inasmuch as new inventions might enable a community to derive the old product from much less capital than before.

These results are so diametrically opposed to Professor Irving Fisher's *dicta* that one is compelled to inquire more closely how his *dicta* can be justified in any degree. To justify them we must make an assumption concerning the effect of inventions on the demand for capital. The character of this assumption depends upon the view taken as to the possibility of obtaining any income without capital, but it is only when we suppose that no income is obtainable without capital that the character of the assumption seems at all plausible. In that event it states that the marginal value of capital is a constant for the amounts of capital associated with the savings from different levels of income which keep time preference constant.¹ In other words, it is assumed that inventions simply extend or pull out the industrial demand for capital, so to speak; that they can be regarded as adding proportionally to the quantity of capital from which each degree of value implied which the marginal value of capital is $i + \frac{r}{c}$, time preference (or the supply price of capital) will be i ; but as the marginal value of capital falls below $i + \frac{r}{c}$, time preference will rise above i . Hence new inventions may increase the rate of interest ultimately, and considerably since $\frac{r}{c}$ may be large.

Case II.—If some income is obtained without capital our original equation becomes

$$\frac{k + r + ci}{k + r + r' + (c + c')i} = \frac{s}{s + s'}$$

k standing for the income obtainable without capital.

It follows that when $s + s'$ is saved the marginal value of capital in the limiting case must be greater than $i + \frac{r}{c}$ by an amount $\frac{k}{c}$, and consequently that the rate of interest will rise higher than in Case I.

¹ If $y = f(x)$ expresses the original demand price for capital and $y = \delta(x)$ is the new demand function, the assumption is

$$\delta(x) = f(nx).$$

Where n means the ratio in which income is increased by the invention when the marginal worth of capital is as before.

in a demand curve can be secured. But this supposition is obviously inconsistent with facts. For instance, when in early stages of civilisation the plough took the place of the spade, the initial part of the demand for capital must have been raised to a higher level. Possibly Professor Irving Fisher's implied assumption is merely that we may adopt such a conception of the effect of inventions on the demand for capital in the absence of exact knowledge. If, however, this is the correct reading of his theory, the passage quoted at the beginning of this article ought not to assert more than a probability; and it would not, of course, follow that the same rate of interest was more probable than a higher or lower rate, apart from the disturbing effects of poverty, and apart from the question whether any income is obtainable without capital, which I do not propose to enter into here.

Nevertheless, I venture to prophesy that inventions in the future will depress the rate of interest, for one reason, because I imagine that a great number of them will take the form of improvements which will enable a unit of capital applied to a certain purpose to turn out more than it does at present; that is to say, because I think that many future inventions will cut out links from the roundabout productive process which, according to Dr. Böhm-Bawerk's conception, is involved in the use of capital. In this paper I argue merely that it cannot be demonstrated from pure theory that inventions must of necessity force down the rate of interest or keep it constant.

The foregoing discussion suggests to me certain comments on Professor Irving Fisher's brilliant and usually convincing exposition. The central fact of interest, he says, is "time preference." It is as true to say that the central fact of value is "commodity preference." What he calls the "marginal rate of return on sacrifice" is, I should contend, just as central a fact in a modern community in the determination of interest as cost is in the determination of value. This "marginal rate of return on sacrifice" is a measure of the marginal productivity of capital when the latter phrase is properly interpreted. What "the marginal productivity of capital" should mean to modern theorists who use the term to indicate one of the determinants of interest is the difference made to income by the application of an additional increment of capital to production. What is meant by "applying capital to production" need not be defined, I imagine. Professor Irving Fisher says, rightly, that "capital-value does not produce income-value," and points out that the rate of interest determines the

value of capital. In these statements he is drawing attention to economic phenomena dealt with by Dr. Marshall under the heading of "quasi-rent." They do not prove that the productivity of capital, properly defined, has no bearing on interest, as Professor Irving Fisher admits. The fact is that when industry is not saturated with capital, fresh capital is devoted to production in the expectation, sometimes realised, that over a period of time it will result in additions to the product, the sum of the undiscounted values of which will exceed the value of the capital applied. The degree in which the former sum will exceed the latter depends, of course, on the quantity of capital applied. Naturally, after its investment, the value of capital suffers mutations according to the expected yield of the newly-invested capital; hence, as I have said, the doctrine of quasi-rent in one of its aspects. It must be conceded, of course, that if there were no such thing as using capital industrially, interest might arise through the borrowings of members of the community from one another. But in the same way things acquire exchange value through exchange when they can no longer be produced; and yet we are not mistaken in saying that under ordinary conditions cost plays a part in the governance of value as well as demand.

S. J. CHAPMAN

Depreciation: The Surveyor's versus the Accountant's Standpoint.

A GREAT deal has been written from time to time from the accountant's standpoint regarding the depreciation and the measurement of the expired outlay on productive plant—including, of course, buildings—but little investigation of the aspect in which the matter presents itself to the surveyor has hitherto been made.

By depreciation is meant, the depreciation for arriving at the net profit rental, and not the selling value. It is also necessary to add that not even a rough estimate of actual depreciation can be made from theoretical considerations only, unless all the circumstances may be considered as absolutely normal.

The following are the principal methods used by accountants when dealing with depreciation, viz., (1) equal fraction of original cost method, (2) percentage off reducing balance method, (3) annuity method, (4) sinking fund method. The first two are those in most general use, but neither of them can be regarded as anything but convenient methods of "writing off." The latter

of the two, indeed, violates in a marked degree the elementary principle underlying the depreciation of all kinds of plant, and the former does so to a lesser extent. Elementary experience teaches that rate of depreciation must necessarily increase with the age of the plant. Hence the second of the above methods, according to which the rate of depreciation is greatest when the plant is new, and gradually diminishes, must be very far removed from actuality; whilst the first method, in which the depreciation is constant throughout the life of the plant, is also necessarily erroneous. Similar results are attained by the use of the third and fourth methods, except in so far as the interest from investments is really received under the sinking fund method, whereas it is a mere fictitious entry under the annuity method. These last two methods, however, probably represent the actual depreciation far more truthfully than either of the first two.

Putting aside all extraneous circumstances affecting the value, it is proposed here to consider how depreciation may reasonably be expected to take place in productive plant under normal conditions.

Elementary experience, as we have said, teaches the surveyor that the older the plant is, the greater is the rate of increase of depreciation. The matter would be, perhaps, best treated by graphic representation. Now there are innumerable curves which would fulfil this condition, but if a further condition is added, then the class of curve may be fixed. Hence in laying down this further condition, the assumption which accords most closely with actual experience should be adopted. Now the following conditions suggest themselves:—

(1) That the tendency to fall in present value is in direct relation to that proportion of its limited economic life, which has expired.

(2) That the rate of increase in depreciation is proportional to the total depreciation itself.

(3) That the rate of depreciation varies as the ratio of the age to the value at that age, or varies directly as the age, and simultaneously inversely as the value.

(4) That the rate of depreciation varies inversely as the value.

(5) That the rate of depreciation is more rapid than the age, and varies as the square of the age.

These conditions are all represented by various well-known curves. The first is the vertical parabola; the second, the logarithmic curve; the third, the ellipse; the fourth, the horizontal parabola; and the fifth, the cubic parabola. Possibly no

single curve represents the manner in which depreciation actually occurs, even in any one kind of plant. In the following tabular statement, which exhibits the depreciation which would follow from the adoption of several curves, the economic life has been assumed in all cases to be one hundred years, only in order that the depreciation may be shown as a percentage. The table shows rate of depreciation, not accumulated depreciation. Curves 1, 2, and 6 are, perhaps, nearer the ideal than any of the others.

	1	2	3	4	5	6
Years.	Parabola (vertical).	Logarithmic curve (S.F. = 2 $\frac{1}{2}$ %).	Ellipse.	Parabola (horizontal).	Cubic Parabola	Logarithmic curve (S.F. = 1 $\frac{3}{4}$ %).
0	0	0	0	0	0	0
10	1	3 $\frac{1}{2}$	2 $\frac{1}{2}$	5	1 $\frac{1}{16}$	4
20	4	8	5	11	1	9
30	9	13	5	16	3	14 $\frac{1}{2}$
40	16	19 $\frac{1}{2}$	8	22	6	21 $\frac{1}{2}$
50	25	27	13	29	12 $\frac{1}{2}$	29
60	36	37	20	37	21 $\frac{1}{2}$	39
70	49	48	29	46	34	50
80	64	62	40	55	51	64
90	81	79	56	68	73	80
100	100	100	100	100	100	100

It is not difficult to show that, if a leasehold insurance policy is taken out with regard to the life of any kind of productive plant, the amounts to which the annual sinking fund or premiums will roll up, at any assumed rate of compound interest, at the end of each year, will, if represented graphically, lie on a logarithmic curve. The curves which result from assuming 2 per cent. and 1 $\frac{3}{4}$ per cent. respectively, are shown in the table above, and the reasons why these two particular rates of interest have been selected will be apparent later on.

Reverting again to the methods used by accountants, it is worthy of note that the "percentage off the reducing balance method" is also represented graphically by a logarithmic curve. This method is advocated by Mr. Ewing Mathieson in his book on *Depreciation of Factories*. In it he gives, as an example, buildings erected at a cost of £10,000, and he takes 1 $\frac{1}{2}$ per cent. annually off the reducing balance. In this way he arrives at a sum of £6,355 as representing their value at the end of thirty years. Now the equation of the logarithmic curve is $y = d^x$:— where x = number of years; y = value at end of x years; and $d = 1 - i$, where i = interest on £1 for one year, or $r/100$. Then $\log y = x \log d$. In this case $x = 30$, and $d = .985$. Hence $\log y =$

T'803089 or $y = .6355$. Mathieson's curve is accordingly logarithmic; but, as the rate of depreciation assumed by it is, contrary to actual experience, a gradually decreasing one, his curve should be turned upside down and reversed end for end to arrive at the curve representing our second suggested condition, which, if not perfect, does not, at all events, violate an elementary principle in a striking manner.

It is clear that the depreciation given by Mathieson's curve is far too great near the commencement of the life of the plant, and far too little near the end. If accountants, when employing the sinking fund method, were to take the sinking fund as accumulating at 2 per cent. or $1\frac{3}{4}$ per cent. instead of 3 per cent., the result would approximate closely to the probable actual depreciation in a great number of instances, but 3 per cent. is usually taken, and the similarity is thereby destroyed. Suppose, for instance, that a leasehold insurance policy is effected with regard to a new house with a probable economic life of, say, a hundred years. It is then interesting to enquire whether the surrender value of that policy at any given date bears any relation to the probable depreciation which has taken place in the house up to that date. The terms of surrender value granted by the leading insurance companies who cultivate the business of leasehold insurance policies show wider discrepancies than might be imagined, but they generally amount to approximately a return of the premiums plus nearly 2 per cent. compound interest as a guaranteed minimum. The surrender value is usually considerably less if it is asked for during the early years of a policy than if not demanded until later, but, in any case, the fact that the minimum surrender value mentioned corresponds fairly well in a great many cases with the depreciation which might have been expected to take place, is only a coincidence, since the former is founded solely on actuarial considerations.

F. OLIVER LYONS

THE POOR LAW CONTROVERSY.

THE Royal Commission on the reform of the Poor Laws gave to the world, rather more than a year ago, a mass of information and two reports, each embodying recommendations for the thorough and complete reconstitution of the existing system of relief and of the machinery for its administration. After a period of exceptionally active discussion, in which the Majority

and the Minority Reports have been canvassed up and down the country in a manner that testifies at least to the popular interest in social questions, three fairly well-defined groups of opinion have been formed as to the best lines of advance. Whatever may be the nature of the eventual legislation on the subject it is likely to embody the results of a compromise between two or more of these groups.

Each group is identified with a theory and a purpose that differentiates it from the others. Moreover, the differences have a wider significance than in their bearing on the Poor Law alone. They run through the whole range of social politics. It is for this reason that the present controversy is recognised as forming a turning point in our social history. For this reason also each group has thought it necessary to adopt an organised method of advocating its beliefs.

The group representative of thorough-going individualist opinion, holding to "the principles of 1834" in their simplicity, finds expression in the publications of the British Constitutional Association. In Poor Law administration it is the opinion of those in this section not only that all State relief should be clearly labelled as such and dispensed by a Poor Law Authority, but that it should be deterrent in its effect and confined to the relief of destitution in a narrow sense. The proposal of the Majority to aim at "remedial and preventative" treatment, to discriminate between one applicant and another, and give preferential forms of assistance to the more "helpable," is viewed with more than suspicion. The view of the 1834 Commissioners that such methods are likely to lead to injustice and corruption and to foster jealousy among the poor is upheld. This group of reformers wish to encourage voluntary effort and charitable help. But they wish for no State interference in the interest of the former and for no formal alliance between the Poor Law and organised charity, fearing that the results of such union would be to "officialise" voluntary service and rob it of its freedom and spontaneity. The Poor Law, in their view, should continue to be administered by an *ad hoc* authority retaining the existing Poor Law areas. That the present system needs certain reforms is admitted. The local authorities are not always efficient or free from corruption. This is to be mended by compulsory co-option and greater central control. Classification by institution is to be secured by a more complete scheme of union combination for special purposes, such as is proposed by Mr. Charles Booth, enforced, if necessary, by the Local Government Board. Outdoor relief is often inadequate, often inappropriate.

This emphasises the dangers and difficulties of giving outdoor relief at all. Reform in this direction can best be obtained by limiting all out relief as far as possible, by improving the qualifications of relieving officers, by enforcing a more uniform policy through the use of an increased central supervision.

It is clear that this group of opinion holds a strong position. It advocates "Reform," not "Revolution." Its policy is continuous with that laid down by the Commission of 1834. It involves no breach of continuity in the system of administration, and thus avoids all the puzzling questions that arise when changes in the general scheme of Local Government are contemplated. But it presents certain marked defects. The Report of the Poor Law Commission lays special emphasis on the fact that many of the causes of pauperism can be removed in whole or in part, and it advocates a comprehensive and positive social policy directed towards this end. Moreover, it lays great stress on the "overlap" that now exists in consequence of the multiplication of different relieving authorities, dealing with different units of the family, and adopting very various methods and standards of assistance. The British Constitutional Association condemns, as does the Royal Commission, the present Provision of Meals Act, which sets up the Education Department as a rival relieving authority to the Guardians. But it fails to meet the difficulty that it will prove politically impossible, even if it is desirable, to repeal the Provision of Meals Act and hand over the relief of school children to an authority imbued with the traditions of the present Poor Law, and suffering its present disfavour. It condemns the Unemployed Workmen Act, but fails to recognise the fact that in times of depression those for whom the Act was originally devised, the decent workmen normally in regular work, exist and cannot be fittingly helped under the present Poor Law.

In a word, while advocating the policy of entrusting the various forms of relief to a single authority, it neglects the one condition upon which such a policy can be effected, namely, by means of a thorough change in the spirit and purpose of the Poor Law that will make it possible to give adequate, appropriate, and individual help to the various classes needing it, in the light of the principle of discrimination. The position taken up by this group of Poor Law reformers is invalidated because it must remain intolerable in practice, as it has proved in the last thirty years, so long as public relief is required by public opinion to be given not only to palliate the condition of destitution, but in certain cases to prevent it. Their proposals must lead, as Mr.

Webb has said, to a "denuded" Poor Law, from which the chief functions have been taken away and entrusted to rival authorities. It leads inevitably to the "break up" of the Poor Law. Mr. Charles Booth's ingenious scheme for improving the present conditions upon the administrative side, by enlarging the area of control to groups of the present parishes under a Poor Law Board, may be preferable on certain grounds to administration by the County or County Borough Councils, the former of which are far from anxious to undertake the new duties. But he appears to underestimate the evil effects of leaving the Education Department and the Public Health Authorities to develop into separate relieving authorities on a larger scale. His scheme, if it were adopted, would have to be developed so as to meet this serious cause of administrative confusion and of that noticeable modern tendency to extend the provision of free gifts to the poor in a manner that is disastrous in its ultimate effects, both on social character and the standard of life.

The opinions expressed by the Majority, and advocated by the National Poor Law Reform Association, have been reached as the result of an effort to meet the new situation and the new outlook upon social problems, while keeping as close as seemed advisable to the teachings of experience and providing against the very real difficulties which all poor relief involves.

It is necessary to present the programme of the Majority with some care, in order to make clear the large measure of agreement that exists between it and the Minority proposals, while at the same time throwing into relief the essential nature of their differences. The Majority would fully endorse Ricardo's dictum that no Poor Law can be approved that does not contemplate its own ultimate extinction. The necessity for public relief is testimony *either* to the failure of individual capacity, moral or industrial, or both, *or* to the failure of social organisation.

The healthy condition is that of economic independence. To a state of public dependence there should come only those who, as the result of selection, have proved their incapacity for independence. The ultimate responsibility for independence, for the general conduct of life, its success or failure, must remain with the individual and the natural family group. But under modern complex conditions the State can encourage this healthy independence, can often alone secure it by offering a fair measure of security of opportunity and opportunity for security. The Commissioners, therefore, first turn attention to the necessity for improving education and industrial training, for interdicting or

controlling certain unhealthy types of occupation, *e.g.*, street trading, casual labour, etc.

They next attack the problem of providing opportunity for security against the normal risks of life—unemployment, sickness, invalidity and old age. They admit the present serious defect in respect of such security. They give a general approval to the method of contributory insurance, administered where possible by the voluntary democratic agencies that have already proved of such value, and recommend the encouragement and assistance of this effort by means of State subsidy.

It is sometimes asked, wherein is the difference between a general system of contributory insurance, *e.g.*, against sickness, and a general system of provision out of the rates? The difference is fundamental. Quite apart from the great advantages of preserving the voluntary administration and interest in such movements as the Friendly Societies and Trade Unions, a scheme of contributory insurance emphasises the responsibility of the individual, while a rate-provided service encourages the expectation of "free" State provision.

It is one of the chief differences between the Majority and Minority that the latter attributes relatively little importance to insurance, on the ground that the poor cannot afford to pay the premium, while they view with favour a general extension of rate-provided service.

In general it is of the first importance to remember that in discussing the details of these forms of "State interference" no abstract principles can profitably be invoked in determining their limits.

Whether casual labour in certain trades should be made illegal, as the minority wish, or whether decasualisation should be achieved by voluntary negotiation, is a matter to be decided by the experience of the efficacy of either method.

Whether in the interests of "opportunity for security" the State can administer a "ten years programme," must depend on the probability that such a programme will be administered so as materially to reduce the fluctuation of employment, or whether it will become a huge permanent relief works of the type so scathingly criticised by the minority themselves. Having elaborated these plans for improving the normal condition of the independent working family, by which means the Majority hope to do most of the "prevention of destitution," they turn to the construction of a scheme of public assistance proper.

Clearly, if the various "social institutions" for meeting the

normal risks of life were completely effective. none would become publicly dependent but the defective or the degraded. The problem would become quite simple, as it was in fact pictured in 1834.

The Commissioners of 1909 expect no such speedy consummation of their hopes. For this reason they have to devise a plan whereby they may extend a helping hand to those temporarily in misfortune, and restore such persons, if possible strengthened, to a condition of independence, while gradually weeding out the idle, improvident, and incapable, and subjecting them to discipline or control. It is at this point that the controversy between the Majority and Minority becomes acute.

The Majority insists that all forms of direct public maintenance should be provided by the public assistance authority. For this there are two chief reasons. In order to help effectively the various members of a family must be treated as persons forming a single group having related needs and responsibilities. To split up the work among a number of different bodies, having primary interests and functions other than assistance, is to perpetuate the existing "overlap" in relief and unnecessarily to multiply the expense of administration.

The second reason is far more important to the ultimate social welfare of the country. It consists in keeping the distinction clear between self-maintenance and public dependence, and therefore clearly separating the function of relief from that of, *e.g.*, education or sanitary control. The community decides which of the economic needs of life the workers of a family shall be expected to provide from their own resources. The whole force of industry, prudence, and foresight must be enlisted to maintain a standard of life wherein the normal income is adequate to meet these normal demands. Hence when public relief is accepted, it must be under conditions of less-eligibility. It is true, as I have argued elsewhere, that the condition of less-eligibility receives an entirely new interpretation when enforced in the light of individual and discriminatory treatment of each case. This is the great change introduced by the proposals of the Majority.

But in certain important categories the Minority propose to substitute for "less-eligibility" "greater-eligibility," and thus to reduce for large sections of the community the normal demands upon normal income. It may be that their economic theory sees in such a course no danger either in a falling standard of life or in the growing habit which they will foster for an ever-increasing expectation of public free provision. It may be that they are more

confident in the ability of a strong bureaucracy to resist this pressure. If so, then these are the fundamental issues between the theories of the Majority and Minority.

The key-note of the policy of the Majority is the upbuilding of appropriate social institutions to enable the working-classes to provide, upon a contributory basis, but with a measure of State help, against the normal risks of life and the administration of relief in the light of the needs and circumstances of the individual case.

The special difficulties besetting the Majority are thus easily understood.

To entrust to a weak or a corrupt Board of Guardians the task of dispensing relief upon a discriminatory method, and empowered to give considerably larger sums than now to really "helpable" cases would be to court failure. Hence their first concern was to devise an administrative body that would be wide and catholic in sympathy, expert in the science of relief, and removed from the dangers of a direct dependence upon the suffrage, possibly in small areas, of those who would gain most from a lax administration. The suggested Public Assistance Authority has been much criticised as "undemocratic," and as taking the powers of the purse from the people. Moreover, the County Councils, except in London, are not anxious to add to their labours. But if it is admitted, as nearly all admit, that existing areas are bad, that existing local administration is often hopelessly weak and sometimes corrupt, and that at the same time not less but more responsible and more difficult work has to be entrusted to local administration unless the ideal of a really helpful system of relief is to be abandoned, then it is not easy to suggest a body differing in essentials from that of the proposed Public Assistance Authority.

Their other chief difficulty arises also from the adoption of a larger purpose than that contemplated by the existing system. Relief, if it is to be adequate, discriminatory, designed to serve as a means of permanently improving the condition of those helped, and of preventing their lapse into chronic dependence, must involve the co-operation of a much longer range of agencies and of a far more numerous body of workers than are now associated with Poor Law work. It would be possible, of course, indefinitely to extend the supply of relieving officers and other paid officials. It is not by any means certain that "officials" necessarily connote "officialism," but it is probable. Moreover, an extensive official organisation is unavoidably costly.

Is it not possible to enlist the energy and sympathy in all

populous districts of many who can and will devote themselves to this form of social service? It is with this object that the Commission advise that a new and larger function should be entrusted to voluntary effort. But the besetting sin of voluntary effort has hitherto been its irregularity and its absence of subordination to a common purpose, and hence its inefficiency.

In order to avoid this danger, the Commission proposed to put voluntary effort on a new footing. To recognise and unify it while subjecting it to a measure of control.

The success or failure of the larger purpose embodied in the Majority's scheme in this direction depends on the response that is made to the call for efficient, voluntary, social service, not from the rich and leisured classes only, but upon a catholic and democratic basis.

The third group of opinion is that represented by the "National Committee for the Prevention of Destitution," the new name which has been substituted for that of the "Committee for the Break-up of the Poor Law." The main essential differences between their policy and that of the Majority have already been indicated. To a large extent the Minority proposals depend for their significance upon the spirit in which they are interpreted.

It is to be noted that many of the ablest supporters of this group have frankly avowed that they regard these proposals, not so much as measures of Poor Law reform, but as affording means whereby the inequality in the distribution of wealth can to some extent be repaired. To this it must be objected that, however desirable a fairer distribution of wealth may be, the method of equalisation which proceeds by the extension of free doles is of all others likely to be most harmful to the working-classes.

This is the essence of the Minority Report as it appears in the numerous Socialist organisations, which have enthusiastically adopted it. This is the meaning of the constant opposition enforced by them between provision which is a form of "charity," State or private, and to which conditions are attached, and provision taken as a "right," that is as a measure of free and unconditional support.

It is well that the issues between these groups should be clearly formulated in order that amidst all the confusion of popular debate the sympathetic seekers after social reform should see clearly what is implied in their adhesion to one or other.

C. J. HAMILTON

TRADE UNIONS AND PARLIAMENTARY REPRESENTATION.

THE decision in *Osborne v. Amalgamated Society of Railway Servants*,¹ followed as it has been by numerous actions in which members of Trade Unions have obtained injunctions against their societies to restrain the application of Union funds for the payment of election expenses and salaries of Members of Parliament, is not merely of great importance in its immediate effect on the political fortunes of Trade Unions and the Labour Party, but the principles involved are so far-reaching that a short statement of the case and some analysis of the different *rationes decidendi* may be useful at the present time.

The Society had been established in 1872, and was registered under the Trade Union Acts, 1871 and 1876. The first of these Acts had established the immunity of members of Trade Unions from criminal prosecution for conspiracy or otherwise on the ground that the purposes of a Trade Union are in restraint of trade. It also, without incorporating Trade Unions, conferred certain privileges and powers on duly registered Unions, notably the power of holding property vested in trustees, and these privileges and powers cannot be obtained without registration, though in other respects registration is not made compulsory. The term "Trade Union" is defined by the amending Act of 1876 (with certain savings) as "any combination, whether temporary or permanent, for regulating the relations between workmen and masters, or between workmen and workmen, or between masters and masters, or for imposing restrictive conditions on the conduct of any trade or business, whether such combination would or would not, if the principal Act had not been passed, have been deemed to have been an unlawful combination by reasons of some one or more of its purposes being in restraint of trade."

The objects of the Society, as stated in the rules, were, shortly, the improvement of the condition and protection of the interests of the members, the promotion of a good understanding between employers and employed, the regulation of their relations, and the settlement of disputes by arbitration, or failing arbitration by other lawful means, and the provision of benefits and of legal assistance to the members and their families. The original rules contained no reference to Parliamentary representation, but in the year 1903 the words "to provide Parliamentary representation" were added to the list of objects. Under the rules as they

¹ Judgment of the Court of Appeal, 28 November 1908, *see* [1909] 1 Chancery 163; affirmed by the House of Lords, 21 December 1909, *see* [1910] Appeal Cases, 87.

stood at the beginning of 1906 a Parliamentary representation fund was established for the purposes of providing for the representation of railwaymen in the House of Commons, and making contributions to the Labour Representation Committee so long as the Society should remain affiliated to it. To this fund an annual subscription of 1s. 1d. per member was to be paid. Later in the same year additions were made and duly registered, of which the most important was to the effect that "all candidates must sign and accept the conditions of the Labour Party, and be subject to their Whip," but these additions were held by the Courts to be invalid on the ground that the formalities required by the rules for the making of new rules had not been complied with.

The action was brought in 1907 against the Union and its trustees by Mr. Osborne, who was secretary of the Walthamstow branch, and had been a member of the Union for sixteen years. He asked for a declaration to the effect that the rule relating to Parliamentary representation, the raising of moneys by compulsory subscription, and the distribution of such moneys in pursuance of the rule were beyond the legal powers of the Society, and for an injunction restraining the defendants from acting under that rule, or so distributing moneys.

The Court of first instance, following a case decided shortly before, dismissed the action. On appeal the Court of Appeal unanimously reversed this decision, and gave judgment for Mr. Osborne, and this judgment was unanimously affirmed by the House of Lords. The reasons on which these judgments were based are as follows :—

In the first place, the three judgments in the Court of Appeal all rely to some extent on the informality attending the making of the alterations in the rules at the end of 1906, a defect which, as the Court held, was not cured by the fact that the alterations had subsequently been registered, and a certificate of registration given by the Registrar. The point was not dealt with in the judgments given in the House of Lords, and is not one of general importance : for the mere informality could have been cured at the next annual general meeting of the Society.

The next point is one of much greater general interest. Trade Unions, though not created by statute, have been, at any rate as regards a large part of their activities, legalised by statute, which has recognised them as having a quasi-corporate status and has conferred special powers and immunities. They thus resemble the numerous statutory bodies of which joint-stock companies form

the most familiar example. The question then arises, does the law in giving its recognition at the same time impose limits on their lawful activities? and, if so, does the provision of a fund for Parliamentary representation fall outside these limits? These questions were answered in the affirmative, unanimously, by the Court of Appeal and by three out of five of the Lords who gave judgment in the House of Lords. The definition in Section 16 of the Act of 1876 (quoted above) was held to be not a mere statement of the objects which must be present in order that a body should be recognised as a Trade Union, but a clause of limitation which prevents a Trade Union from pursuing any objects not incident or auxiliary to the objects stated in the definition. It is true that the provision of benefits to members, which is indisputably among the lawful purposes of Trade Unions, is not mentioned in that section, but whether on the ground that the provision of such benefits falls within the words "regulating the relations between workmen and workmen" (as held by Lord Justice Farwell) or is collateral or auxiliary to the purposes mentioned in the Section (as held by Lord Atkinson), or is recognised and sanctioned by Parliament in other sections of the Act of 1871 (as pointed out by the Master of the Rolls), the argument based on this omission from the definition clause was held insufficient to extend the powers of Trade Unions to the purposes of Parliamentary representation. Lord James of Hereford, on the other hand, held that the clause in question was "not a clause of limitation or exhaustive definition," and that "the Legislature only intended to require certain qualifications to exist before an entity could become a Trade Union, but the objects and limits of action of a properly qualified Trade Union are not dealt with by the section." Lord Shaw, without dissenting, hesitated to accept the view of the majority on this point. "I have some hesitation," he said, "in so construing language of statutory recognition as a definition imposing such hard and fast restrictive limits as could cramp the development and energies and destroy the natural movements of the living organism."

In the third place, quite apart from the question of statutory limitation, the doctrine of public policy was invoked, to show the illegality of the rules and proposed expenditure in question. The view of Lord Justice Fletcher Moulton seems to have been based, mainly at any rate, on the additions made to the rules in 1906. According to his view, these additions showed that: "The objects of the Parliamentary fund is to procure Members of Parliament

who shall be bound to vote in a prescribed manner, and that it is in consideration of their undertaking so to vote that the funds of the Society are to be expended in procuring their election and in supporting them in Parliament." Such an arrangement must be treated as equivalent in legal effect to a contract between A and B that A will pay the election expenses of B and support him while in Parliament, provided that B will engage to vote as A directs. The duty of an elected representative towards the electors and the public is one in the discharge of which he must not have contractually fettered himself. Lord Justice Farwell carried the same line of reasoning further. While holding that the effect of the Union's scheme was that "certain constituencies are to be disfranchised by substituting for a member representing them a paid delegate bound to put the interests of those who pay him before all other considerations," he later lays stress rather on the Member's duty to the country as a whole than on that to his own constituents. But the reasoning of an earlier part of his judgment would seem to be clearly independent of the additions of 1906 to the rules. He there lays down that it is "illegal for a Trade Union to compel their members to allow their funds to be applied and themselves to subscribe," as being inconsistent with the political freedom of each member of the Union. "It is not enough to say that a man's vote has not been influenced. It is also necessary for his freedom that he shall not have been coerced into supporting by money or otherwise the candidate whom he wishes to oppose." In the House of Lords Lord Shaw's elaborate judgment, which went entirely on the ground of public policy, seems to be based on the additions of 1906. He carefully guards against a sweeping condemnation of payment of Members as such. "Granted, however, that no conditions are imposed subversive of or imperilling their freedom, it will be observed that nothing that has been said attaches a taint or shadow of illegality to the payment of Members of Parliament. Such a payment may be a tribute to character, or a recognition of talent coupled with a desire that these should be secured for the service of the State, or it may spring from a legitimate wish that the views, the needs, the perils of particular, and it may be large, classes of His Majesty's subjects should be expressed in Parliament by those who speak with the authority of practical experience."

On this question of public policy the Master of the Rolls, and the other Members of the House of Lords, abstained from expressing any opinion, contenting themselves with the argument based

on the Act of 1876. Lord James of Hereford, while differing from the majority on the construction of the definition clause in the Act of 1876, and holding it "unnecessary that any opinion should be expressed on the very broad constitutional question raised for the first time in the Court of Appeal affecting the general support of Members," came to the conclusion that the application of money to the maintenance of a Member whose action is controlled by the rules as amended in October, 1906, is not within the powers of a Trade Union, on the ground that the vote of such a member "would have to be given in respect of all matters, including those of a most general character, such as confidence in a Ministry or the policy of a Budget—matters unconnected, directly at least, with the interests of Labour."

W. M. GELDART

Report of the Vice-Regal Commission on Irish Railways, including Light Railways. (Ed. 5,247. 1s. 7d.)

ALMOST exactly four years after its appointment, the Commission on Irish Railways has issued its report. The inquiry has been of a most thorough nature. No less than 293 witnesses have been examined, the number including representatives of 103 public bodies.

It is much to be regretted that the Commissioners have not been able to arrive at an unanimous conclusion. The report is signed by four members only, whilst a minority report is submitted signed by the remaining three members. Further, whilst the Commission contained two gentlemen with long railway experience, one of their signatures is attached to each report. The balance of opinion is thus as evenly balanced as it can well be.

Whilst certain grave irregularities have come to light in the course of the inquiry, it cannot be said that the Irish railway companies have come out of the investigation badly. Two of the principal companies have been guilty of giving rebates irregularly on a considerable scale. Rate books have not always been properly entered up. The Commission is, however, unanimously of the opinion that no serious injustice has accrued from these malpractices. The rebates were a matter of common knowledge, and it would appear that few traders failed to get the advantages they gave. As regards management, too, the Commissioners are again unanimously of the opinion that no serious fault can be found with its efficiency. Of the light railways this is not so true, but the opinion is expressed that the

legislation in regard to them is very defective and requires considerable amendment.

At the same time, as has been the case in all previous inquiries, the conclusion has been unanimously come to, that under the present organisation of the railway system Ireland is not served as well as it might be. The total mileage of the railways is only 3,411½ miles, and this includes 503 miles of light railway. The system, exclusive of light railways, is worked by no less than sixteen independent companies. This precludes really economical working. Each railway requires its separate organisation and rolling-stock. Most of the companies have a complete system of workshops. In practically all cases the railways and all they include are on too small a scale for true economy. "The Commission is unanimous that in view of the economic condition of Ireland there should be unification of the Irish railways." The desirability of unification, particularly in view of the economies which have accrued in Great Britain from the recent railway combinations, and in the United States from the extension of a railway by the method of acquiring control of others, seems so clear that it hardly seems necessary to base the recommendation on the economic condition of the country.

It is at this point that the two reports diverge. The minority report favours a single system continuing under private management as a commercial undertaking. In this opinion they follow the conclusions come to by previous commissions. The relatively backward condition of the country is due in their opinion to the railways in a very small degree. They do not consider reductions in railway rates would be the best way of "stimulating traffic and assisting the development of production in Ireland." The crying need is for the organisation of production and distribution as they are organised abroad. Admitting this last to be true, we cannot follow why reductions in railway rates should not have the effect of stimulating traffic in Ireland. It is not necessary to decry the advantage of assistance given in this way, even if it is thought organisation of production and distribution is the more important. Certainly abroad there is no disposition to take up such an attitude.

The majority holds the view that large reductions of railway rates are essential for the proper development of Ireland, its agriculture and industries. The reductions, to be effective, are so large that for many years a loss must accrue, and the loss would be such as no commercial undertaking could face. Industry and trade in Ireland, it is considered, are restricted "by reason of

the fact that internal and export transit rates are on a higher scale than the rates charged for conveyance of commodities which compete with Irish products in Irish and British markets or with which Irish products might compete, if conditions were rendered less disadvantageous to Ireland by a lower scale of transit rates." A careful examination of the evidence tends to confirm this conclusion; that is to say, it is a factor, and an important factor, in the Irish problem. The conclusion drawn from it that State assistance is necessary seems clear and obvious.

The majority report goes further, and lays down that there is no effective alternative to making the railways "public property, consolidating them into a single system, and working that system under representative control for the benefit of the country." As it is important that the new system should not be cramped by any want or fear of want of sufficient financial means, having regard to the circumstances and "unsound economic condition" of the country, it is recommended that an annual grant should be made from the Exchequer of not less than a quarter of a million, and, if there should still be a deficiency, then that should be defrayed out of the proceeds of a general Irish rate.

There seems little room for doubt that the general principle of the majority report is right. For a country in the condition of Ireland the railways should be managed primarily in the interests of the country with a view to improving its agriculture and industries and so ultimately to increase its general prosperity. The fight will come over the means proposed for achieving this. The managing body proposed is to consist of twenty men, twelve of whom are to be elected by the ratepayers of Ireland. Is such a body likely to prove an efficient controller of this important industry? What assurance is there against election on purely political party lines, and against political influence? The ill-effects of political influence have proved serious in our Colonies and in many foreign countries, and even to-day few, if any, have found a really effective remedy against it. We have grave hesitation over accepting this part of the report. The proposed authority seems more suitable for an advisory than a managing board.

However one may agree with the principles of the recommendations, it is difficult to feel satisfied with the details. This is perhaps due partly to lack of information. For instance, there is nothing to show how the suggested minimum amount of the annual grant from the National Exchequer has been arrived at. No estimate appears to have been made of the sum over and

above this likely to be required, though it is indicated that the Commissioners think it admits of computation. In fact, the report is singularly silent on many important points connected with the more detailed recommendations. To accept it in its entirety would be to take a leap in the dark.

We may briefly sum up the points which seem to us clearly established. Irish agriculture and industries require cheaper transport than they now have, and the railway rates question is an important factor in the Irish problem. Waste on the railways must be diminished as far as possible, and this can only be achieved by unification of the railways. The economies likely to accrue therefrom are not sufficient to provide for the reduction of rates necessary, and a subsidy from the State is essential. The monopoly thus created and subsidised by the State ought not to be left wholly in private hands, but must be effectively controlled by some public body. Moreover, the end will not be gained if the railways are managed primarily in the interests of shareholders as short time interests take too prominent a place.

Much further than this we are not prepared to go at present. The remaining recommendations may be correct. They are, however, open to criticisms, the answers to which are by no means clear.

W. T. STEPHENSON

Report of the Departmental Committee on the Employment of Children Act, 1903. (Cd. 5,229. 1910. Pp. 23. Price 2½d.)

IN carrying out their inquiry the very able Committee that has just reported chose, and chose quite rightly, to narrow it down to the smaller, but very urgent, question of street trading, rather than attempt to deal with the employment of children as a whole; and even within these narrower limits their attention has been mainly devoted to the juvenile newspaper seller. Of the various forms of child employment street trading shows the greatest dangers and the least advantages, and the selling of newspapers in the street focuses all the evils of street selling. For this reason the course taken by the Committee was a wise one. First, because they were attacking the very heart of the malady; and, secondly, because street trading is, so much more than other forms of child employment, a problem in and by itself, and capable of independent treatment. Two reports are issued by a majority of seven and a minority of four respectively, and in this case the

divergence of opinion, however regrettable on general grounds, has the merit of providing a clear treatment of the subject from two different sides. The Majority insists on the evils of street trading and on the treatment required to get rid of them. It proposes the drastic remedy of complete abolition in the immediate future. On the other hand, Mr. Bridgeman and his colleagues point to the difficulties in the way of such a policy, to the hardships it will involve and the safeguards it will require, and suggest a more gradual treatment. For these reasons one cannot but welcome a divided report: for we require both a root and branch proposal for reform and a clear statement of the conditions with which it deals and under which it will be carried out.

By the Act of 1903 street trading was defined to include "the hawking of newspapers, matches, flowers, and other articles, playing, singing and performing for profit, shoe-blackening or any other like occupation, carried on in streets and public places." This definition, however, has been a source of confusion and difficulty. A boy selling newspapers is a street trader; indeed, this is the most important form of that trade. A boy carrying newspapers to deliver at customers' houses is not no more than any other errand-boy. But what, when a boy sells newspapers incidentally to the latter occupation? The Committee, indeed, point out the distinction, and also that the latter is usually a harmless, and may even be a beneficial, form of employment: but to draw the dividing line is "practically impossible." The law, as at present constituted by the Act of 1903 and others, prohibits street trading by children under 11, and night work (*i.e.*, between 9 p.m. and 6 a.m., subject to variation by local bye-laws) for boys under 14 and girls under 16. Further, Section 2 of this Act allows local bye-laws to regulate it for children over these ages in various ways—by compelling it to be carried out under certain conditions, or subject to the holding of a licence, by regulating such licence, by determining the days, hours and place of such trading, and so on. There are two limits—that the right to trade is not made the subject of conditions referring to poverty or bad character, and that special regard shall be paid to preventing street trading by girls under 16. The latter limitation is undeniably sound; the former appears, as the Majority implies, to be a mistake.

Little if any use has been made outside England and Wales of the powers thus conferred. In Scotland only three local authorities out of 89, and 27 school boards out of 979, and in Ireland only five of the 76 local bodies have exercised their rights. In England, though only one of the 62 administrative counties,

and 41 of the 191 urban districts have made bye-laws, no fewer than 50 of the county boroughs have done so. These include most of the large cities, and possess a population, exclusive of London, of $8\frac{1}{2}$ millions. The London County Council is trying to abolish street trading by girls altogether. From these figures Sir Edward Troup deduces that the evils connected with street trading "are most pressing in crowded centres, and the problem is essentially a town problem." Some of these bye-laws are little more than a dead letter, and where no bye-laws exist the statutory provisions of the Act are often disregarded. In one town children as young as seven were found trading, and no doubt a considerable number do so trade who are below the statutory age of 11. Moreover, though regulation by bye law was intended to allow for differences in local conditions, those that exist are substantially the same.

Usually such bye-laws prohibit street trading by girls under 16, except in company with a parent, this latter proviso being meant to provide for the case of the children of costermongers. The expediency of this exception was the subject of dispute. The representatives of the London County Council and other witnesses were against it, their views being endorsed by the Majority. On the other hand, the police witnesses favoured it, and the Minority refused to pronounce definitely on the point. The inability to make the grant of a licence subject to conditions has been harmful, preventing refusal even when the number was excessive, or the child obviously fitted for something better. The Majority do not, perhaps, do full justice to the work of the Act, where bye-laws have been rigorously enforced. Their view that "a system of licensing and badging is but a method of legalising what is indisputably an evil, and that a set of bye-laws, however rigorously enforced, can at best only modify the difficulties of the position," is, no doubt, true: but in some cases, notably Manchester, as they point out, the effect has been wonderfully good. Indeed, it is a question whether a national enforcement of bye-laws of the Manchester or London standard will not have to precede, and prepare the way for, the full policy of abolition.

The number of street traders is given at 22,194 licences (19,249 boys, 2,945 girls, under 16) during 1908 in England and Wales, exclusive of London, where badges for 13,873 boys and 1,000 girls were issued. These, however, do not cover the full number, since some towns do not issue, and an appreciable number of children do not take out, licences—such, for instance, as those boys who help the regular sellers at busy times, or those who take it up temporarily during periods of family distress. A very

large proportion of the licensed sellers are under 14—something like three-quarters in London and three-fifths elsewhere. Some boys in newspaper selling are employed by newsagents : but mostly “they sell not as employed agents but as principals, often employing younger lads themselves, and their receipts are in the form of profits and not of wages.” Normal earnings would appear to vary from 5s. to 6s. up to 8s. or 10s. per week ; but maybe as much as 20s. or as little as 1s. or 1s. 6d. Besides the sale of newspapers, other forms of street trading are the sale of matches and flowers, the former being a cloak for begging, and the delivery of goods, especially milk and newspapers, which is accompanied by an occasional sale. “Shoe-blackening appears to be a declining industry.”

The Committee speaks forcibly, but justly, of the evils of the system. It exposes the youthful trader to many moral evils and to the habits of the gutter. “If a match-seller he is likely to become a beggar, if a newspaper seller a gambler” and on the latter point the evidence is very strong ; and with girls an unquestionable danger to morals in the narrower sense must be added. Further, there is the physical danger to health from exposure to inclement weather, modified in some cases by the advantages of an open-air life. Street trading also breeds a restless disposition and dislike of restraint, and though the majority of street traders are still at school, and many take up other work on leaving, yet there is a considerable margin who do not do so. Finally, the money, often easily earned, is as easily spent on sweets and amusements, if not on gambling ; in only a minority of cases is it taken home. The Minority, however, urge, and back their opinion by considerable evidence, that this is far more frequently done than the Majority suppose, and particularly in periods of temporary misfortune. The Majority, however, propose to meet hardships in individual cases by the provision of machinery for finding alternative employments. As regards the labour market, it is probable that the penny papers would be little, if at all, affected by abolition, whilst the halfpenny ones probably would. Little inconvenience, however, would be caused to the public : and “it appears to us economically unjustifiable to use children to their own detriment for work that can be done by other means.”

To deal with the matter, the Majority propose prohibition of street trading for boys under 17 and girls up to 18 or even 21. In the former case 17 is a better age than 16, preventing, as is pointed out, the boys discharged from industrial schools at 16 from “falling again into casual habits.” They think that by

organisation alternative employments is feasible, owing to the frequent shortage of unskilled boy labour, and even the job of the errand-boy or van-boy order would be better than this. In the writer's judgment, the Majority takes a more favourable view of the matter than the evidence quite warrants, and the evidence itself gives, perhaps, an unduly favourable view. In any case, an organisation worked by the Local Education Authorities in conjunction with the Labour Exchanges should assist the displaced children to alternative employments. Such a power the Scotch School Boards already possess. They should also be responsible for the administration of the Act, working in close touch with the police authorities. Offences should be tried in the Children's Court, and the scale of penalties under the Children's Act (1908) should be revised.

The best criticism of these proposals is, perhaps, the statement of policy put forward by the Minority, who fully endorse their strictures as to the evils of street trading, especially in certain forms. They point out, however, that the failure to enforce the existing Act on the part of local authorities should entail caution in establishing more stringent measures. In this there is much truth, and they also point to the benefits produced by the present Act. But they urge caution on several grounds; first, that street traders are recruited from the poorest and worst homes, and, therefore, at a difficulty in competition for other employment; and, secondly, that the earnings of street traders do in many cases go to the support of the home. For the latter contention they produce considerable evidence; and, thirdly, they urge that if the prohibition resulted in the substitution of home work for street trading, it would be a positive disadvantage. Finally, they do not find any special evils attaching to many forms of street trading apart from newspaper and match-selling. They propose, therefore, further powers for Local Authorities to deal with street trading by boys, chiefly in connection with newspapers, including power to prohibit it up to 18 where other suitable employment is available, and power to withdraw a licence which is not being used to any good purpose. For other classes of street trading regulation is adequate. The licensing system should be extended to all Urban Authorities, who should be compelled to appoint sufficient supervisory officers, and girls under 18 should be prohibited from trading in the streets, with a reservation for further enquiry into the case of costermongers.

Both reports appear to make valuable suggestions and to deal with the matter on sound and reasonable lines; but on the whole

the Minority do not undermine the main arguments of the Majority, though they show the need of caution and perhaps of delay. Indeed, their argument as to the absence of alternative employments appears to give grounds for urging the latter as regards complete and total prohibition. But it is to this that effort must finally tend : and in the immediate future two lines of policy could be adopted either consecutively or together. One is the complete and compulsory enforcement in all urban districts of bye-laws of the Manchester standard. The other is the prohibition of newspaper selling only, as being the form of street trading that displays all the worst defects of the system, whilst lacking many of its advantages. Afterwards other forms could be dealt with in detail and far more easily, when this, the largest and worst, is removed. Further, there is a strong case for prohibiting any such trading by children of school age, and the final goal will be complete prohibition.

N. B. DEARLE

Reports on the Effects of Employment or Assistance given to the Unemployed since 1886 as a means of relieving Distress outside the Poor Law—in Scotland. By the Rev. J. C. PRINGLE. (Cd. 5,073—1910.) *And in Ireland.* By Mr. CYRIL JACKSON. (Cd. 4,890—1909.) (Royal Commission on the Poor Laws and Relief of Distress, Appendix Volumes XIX. A. and B. Pp. 205—32. Price 3s. 6d. and 1s. 10d. respectively.)

THESE two volumes are a supplement to the systematic and exhaustive treatment of this side of the Unemployed Problem as it affects England, which the authors have already given us.¹ In dealing with Scotland and Ireland they have acted separately, each being entirely responsible for a single country. The lines of investigation, however, have been similar to those followed in the report on England. It will, therefore, be sufficient to notice points of special interest in these later reports, more particularly those which illustrate the differences between the countries. On the whole, there is a marked similarity, but there are also appreciable divergencies, which are most marked in the case of Ireland.

The Act has been very little adopted in that country, having been almost from the first regarded with suspicion. This no doubt accounts for the brevity of Mr. Jackson's report. An appreciable measure of relief has been given, however, in the

¹ Noticed in the *Economic Journal*, Vol. XX.

rural districts of the West. Taking the country as a whole, we find an excessive number of old men in the population—Dublin being an exception—together with a proportion of unemployment among young men at least equal to that in England. In Dublin and Galway it is considerably higher than in London, and in Drogheda almost the same. This is partly accounted for by the preference given for applicants with a number of dependent children, who would normally be between 25 and 40. Still, "in Dublin young men are very much unemployed, and while there is undoubtedly a demand for farm labour in rural Ireland, there are a number of able-bodied men in the capital who do not do rural work and do not emigrate." As in England, applicants appear to have been mainly those who were always out in the winter. Dublin, too, is beginning to experience the boy-labour problem. An exceptionally large number of ex-soldiers are found among the applicants, of whom casual labourers, as in England, form the bulk. The large proportion of general labourers in Belfast (830 out of 928) suggests that the local industries, taking one year with another, are failing to absorb the population.

Of the towns only Cork and Belfast (1905-6) and Drogheda (1906-7) adopted the Act. The Dublin Corporation refused to do so; and a Committee of the Philanthropic Reform Association, which corresponds to the English Charity Organisation Society, supported by the Lord Mayor, undertook the work. Its most interesting results were an attempt to move families to more suitable places, and it expressed the opinion that there is "no need for a labour exchange in Dublin," as adequate means of communication already exist. As in England, the Distress Committees had to feel their way, and this led to very slipshod methods in the first instance, but considerable improvement was manifested later. This suggests that some of the evils, urged with so much reason against relief works, will tend to disappear with the growth of experience. Rural Distress Committees have shown considerable activity, more particularly in the famine districts. Corporation relief work has been considerable, and sometimes on sound lines. Belfast, for instance, "does something to relieve the annual winter depression by arranging . . . some of its ordinary work at an inconvenient season." Trade Unionism is very strong in Ireland, and "labourers seem exceptionally well organised": but low wages render it difficult to pay contributions on the English scale.

The Act has not been in operation sufficiently long to allow a complete estimate of its effects; but it would appear that there

is a danger that annual relief works will further deplete the country districts by adding to the attractions of Dublin. On the other hand, "the expenditure of the relief money in the country districts has been a wise arrangement on many grounds," and more particularly as tending, if only to a slight extent, to check the rural depopulation. "The grant made to Ireland has been spent to better advantage in the country districts." On the whole, however, Ireland has "a smaller proportion of genuine workers unemployed than England, which has more acute trade depressions and larger industrial populations"; but the depression of 1908-9 was probably more acute, though of shorter duration.

In Scotland, on the other hand, the conditions show a far closer resemblance to those obtaining in England, but some of the problems of unemployment have not reached so acute a phase. The report opens with a most suggestive *résumé* of past trade depressions and a very interesting treatment of the causes of distress during their continuance. As in England, "the resources of a number of people were known to be reduced to a minimum, although it is possible that their resources were little if at all greater in other years." Comparing the tables in the Appendix with the returns for later years in the *Labour Gazette*, it would appear that the engineering and shipbuilding trades experience more acute depressions than in England, whilst seasonal influences in the building trades are obviously more severe. The Edinburgh figures tend to show that "the skilled man only applies when age has weakened his hold upon the market, the general labourer applies young because then he is most useless"; but the Dunfermline returns do not bear this out. It should be remembered, however, that the skilled applicants include many who are not properly trained; and the whole of Mr. Pringle's treatment of the ages of the unemployed will repay study.

Perhaps two of the most obvious evils of modern industry in England are boy-labour and an over-supply of unskilled workers. In both these matters Scotland seems to be more favourably situated. Several towns returned the answer, "no boy-labour," and some that there was no congestion of unskilled labour; but in other cases the conditions are much as in England, and from incidental references it would appear that the supply of labour is on the whole more than adequate to the demand. Boys have slightly encroached on adult male labour in some industries, but in others the proportion has declined.

The report, owing mainly to the greater wealth of material, is longer than that of Mr. Jackson, and is clearly and ably

written : and not the least of its merits is the *résumé* of information from different towns with which the various parts of the report are illustrated. Both investigators indeed have done their work thoroughly and well.

N. B. DEARLE

Enquête sur la situation hygiénique des habitations ouvrières dans la commune de Herstal. By PROFESSOR ERNEST MAHAM. (Liège : Imp. Liégeoise. 1910. 1. Vol. 8. Pp. 224.)

It is well known that in Belgian "Patronage Committees" (*Comités de patronage*) have been organised for the purpose of advising the public authorities on all matters touching the housing of the working classes. The work of these Committees is described by Mr. B. S. Rowntree in his recent book.¹ Professor Maham has drawn up the report presented to the Liège Committee on the results of a minute investigation undertaken at Herstal, a large industrial commune with 29,000 inhabitants, near Liège. The investigation covered 1,914 houses, including 2,095 families and 8,991 persons, that is to say, almost one-half of the dwellings, families and inhabitants of the commune. Thus the whole of the working-class population came under observation. One could not wish for more information on each dwelling than that offered in the ten chapters of the inquiry. The hygienic condition of the places where the houses are situated, their relations with surrounding buildings, the people occupying them, and the manner in which they use their dwellings, economic conditions, the state of repair, orderliness and cleanliness of the dwellings, natural lighting, ventilation, water supply, drainage, are studied successively in great detail. The results are in each case summarised in numerous statistical tables, and we note the care with which the author gives the mean, mode, median, and quartiles for each frequency series.

In Belgium, as in England, each house is usually inhabited by only one family. Herstal forms no exception to this rule, since there are there 2,095 families for 1,914 houses. The overcrowding is not excessive, the average dwelling consisting of three rooms, occupied by an average of 4.43 persons. From the economic point of view also, the situation is, generally speaking, not bad, since the rent represents on an average only 9.27 per cent. of the income. But there are here, as everywhere,

¹ Reviewed in the present number of the ECONOMIC JOURNAL.—ED.

very regrettable extreme cases; bedrooms occupied by twelve persons, disorderly beds composed only of dirty rags, on which five or six persons sleep higgledy-piggledy, where the air space is as low as two cubic metres for each person, and where the promiscuity of the sexes is revolting. The author complains also of defects in ventilation, and of the bad condition of the sanitary accommodation. A variety of photographs (forty in number) show us many of the horrors, and some splendid examples of houses well kept and well built.

The object of the investigation was not merely descriptive; it drew the attention of the Burgermaster, who has charge of matters of public health, to conditions calling for his intervention, and the appendices show the practical results of the Patronage Committee's investigations.

Two points in particular will attract the attention of the English reader. These are the large number of workmen possessing their own houses (376), and the advice given by the author to the authorities respecting the future of the commune. There, also, the question of town-planning is occupying close attention.

OBITUARY.

WILLIAM GRAHAM SUMNER.

THE elements of economic excellence were always present in an abundant measure, though they were not always mixed in the same proportions, in the work of the distinguished writer and teacher lately lost to America. Professor Sumner was perhaps best known in this country by his fearless use of abstract reasoning in combating the cruder forms of Protectionism. But there could not be said of him, with even a show of justice, what used to be said of Cobden, that he was a man of one idea. He was just as much an historian as a theorist. We should not be far wrong in describing him as having practised what Mill understood as the "historical method," implying the explanation of past events by general reasoning. Certainly Sumner's earlier historical works, notably his "History of Protection" (1877) and his "History of American Currency" (1874), are heavily charged with economic dialectics. Later the historical element seems to have preponderated. The veteran economist devoted himself to the study of manners and customs, what he comprehensively called "mores." Such is the subject-matter of *Folkways*, the fruit of many years' research, which he published in 1907.

Some moralists may think that too much is assigned to institutions, too little to general principles, when the author concludes that "the mores can make anything right and prevent condemnation of anything." We may say, at least, that the author is not open to the imputation—sometimes brought against the abstract school of economists—of ignoring the variety and complexity of human nature. Indeed, "his so-called dogmatism was a myth." We quote these words from one of the many tributes which have been paid to the memory of Professor Sumner by his colleagues and pupils. During his long tenure of the Chair of Political and Social Science at Yale University—for thirty-seven years—he exercised a commanding influence over his generation. As a teacher he possessed the magical power of exciting interest in his subject. Not the least of the obligations which he has conferred on economists arises from his having induced young men of superior ability to adopt the career of Economics.

CURRENT TOPICS.

THE Board of Trade unemployment chart continues to reflect the gradual improvement that has been taking place in trade conditions during the present year. Since the end of January the percentage of unemployed, as dealt with in the returns on which the chart is based, declined steadily till the end of June from 6·7 to 3·7, and a very slight upward movement in July to 3·8 probably finds its chief explanation in normal seasonal causes. At the end of July the figure was nearly a point less than the mean of the years 1900-9, and four points less than that for the same month in both 1908 and 1909, in each of which years the maximum for July in the last ten years was recorded.

CHANGES in rates of wages recorded reflect the same improvement. The aggregate weekly increase from January to July is not large, amounting to only £4,475 per week, but in the corresponding months for 1909 there was an aggregate decrease exceeding £68,000 per week. In that year, moreover, in eleven out of fourteen groups of trade decreases were recorded as contrasted with the small but unbroken series of increases now shown for the first seven months of 1910.

THE general figures of Trade Union membership at the end of 1909 have now been published, and show a total of 2,347,461. With the exception of the two preceding years, when trade depression caused a slight falling away, the above total is the highest recorded and, with the exceptions mentioned, exceeds by more than ten per cent. any earlier figure. During 1909 the largest percentage decreases were shown in the building trades, the wood-working and furnishing trades, and railway and other transport services. The maximum decline in membership of 8·2 was shown in the building trades, a group of trades in which the numbers have been falling continuously for nine years. The decline in the decade 1900-9 is a little over 35 per cent., the numbers having fallen from something over a quarter of a million to 163,027. The strong numerical position in the mining and quarrying and the textile groups has been maintained, and almost maintained in the metal, engineering and shipbuilding trades.

No industrial dispute of great extent has (Sept. 1) occurred during the last few months in this country, but in one or two instances those which have taken place have attracted considerable attention, and there are signs, due to various causes, partly to cleavage in matters of political opinion, occasionally, as among the South Wales miners, to strained relationships with non-unionists, and probably in most cases accentuated by the Osborne judgment, rendering Trade Union levies for political purposes illegal, of some unsettlement in the Trade Union and Labour world.

A DISPUTE on the North-Eastern Railway, lasting only five days and affecting only some 5,000 men, has been the most conspicuous recent instance of labour unrest. The occasion of this dispute—the transfer of a head shunter from one position to another—was only its partial cause, but the marked features of the sudden cessation of work that ensued have been its spontaneity and its irresponsibility, while the feature of the sudden resumption of work has been the power which it illustrated of determined official leadership. The speedy settlement was due, however, not only to the action taken by the Secretary and Executive of the Amalgamated Society of Railway Servants in repudiating the behaviour of the North-Eastern men and refusing strike pay, but also to the conciliatory attitude of the Company; and thus a spasmodic movement that cannot but tend to weaken the principle

of collective bargaining, and that on the side of the employees threw obligations, both direct and indirect, to the winds, ended by illustrating the power of a strong organisation to recover a section of its members from a false position into which they had blundered.

A DISPUTE among the stevedores of Newport (Mon.), turning on a proposal to substitute day rates for piece-work when general cargo was being handled, and nominally ending in a decision that the method of payment chosen, should be at the option of the employer, raised in an accentuated form the vexed question of the relationship of "free" and Union labour. Police protection of the former that has been employed by one firm has been necessary both for labour imported and for occasional local labour that it has been possible to secure, and at times this protection has been inadequate. Thus, although the dispute was supposed to have been ended many weeks previously, sentences and fines, with alternatives of two and one month's imprisonment with hard labour, were passed towards the end of August in the Newport Court for assaults on a local labourer employed on a task which the organised labour of the port was still refusing to undertake.

THE interesting Canadian Industrial Disputes Act of 1907, which, although narrower in its scope, represents roughly a compromise between the compulsory systems of New Zealand and Western Australia and the voluntary system of this country, has been amended mainly with the object of facilitating and cheapening in certain cases recourse to the Act, and thus the appointment under it of its Boards of Conciliation and Investigation in the case of disputes that cannot be otherwise settled.

IN connection with the new national system of Labour Exchanges, the question of juvenile employment has been attracting considerable attention, and perhaps no question connected with the Exchanges more thoroughly deserves it, since the mechanical placing of juvenile labour in accordance with the chances of a thoughtless and often inconsiderate demand might tend to swell the numbers of the half-trained and the inefficient, and thus to perpetuate that very discontinuity of employment which the Exchanges are, it is hoped, destined to lessen. The chief administrative point under discussion has been as to the appropriate respective spheres of the Boards of Trade and of Education

in this matter. Identified with the latter are much knowledge of the children, and in many districts an active interest in the industrial future of those who are leaving the schools. In the hands of the former are the new national machinery for directing labour into channels in which it is required, and an increasingly expert knowledge of the industrial opportunities that are offering and likely to offer. It would thus appear to be a clear case in which, for the interest of all concerned, the co-ordination of all the experience, sympathy, machinery and administrative efficiency that are available is essential. In London itself an important step in this direction has been taken, and an Advisory Committee for Juvenile Employment in connection with the Exchanges has been appointed, which includes six members appointed by the London County Council, as the local education authority.

ABOUT 105 Labour Exchanges are now open throughout the country, and the returns issued for the end of July refer to 103 of these. At that date there were 73,604 applications on the register of those seeking employment, who have either registered or renewed their application within the preceding seven days. Of these 54,332 were those of men and 10,697 of women. Of the total of what may be called live applications 22,083 were on the various London registers. Vacancies notified by employers during July numbered 39,746, and the vacancies filled 33,813, thus representing no fewer than 85 per cent. of those notified.

THE regulations recently issued by the Board of Trade for the formation of a Trade Board for the Readymade and Wholesale Bespoke Tailoring Trade of Great Britain provide for a Board consisting of not less than 13 or more than 17 members representing employers and employed respectively, and not less than three (including the Chairman and Deputy Chairman) or more than five appointed directly by the Board of Trade, without, as in the other classes of members, any nomination by either employers or workers. The full Board will thus consist of not less than 29 or more than 37 members. In order to ensure as far as practicable the territorial representation of employers, the country has been divided into seven large areas—Scotland, for instance, is to furnish two employer members of the new Board, and Lancashire, with nine more or less adjacent other counties, one member. District Trade Committees, regulations for which have now been issued, will doubtless be formed as provided by the

Trade Boards Act. but the task of the new Board when formed will, in spite of any assistance which it may thus obtain, and perhaps to some extent in consequence of it, necessarily be one of great complexity and delicacy. Among the members representing workers due regard is to be paid to the proper representation of home workers, but the abortive recommendation of the recent Parliamentary Committee that wage scales should refer exclusively to this class is, of course, abandoned. A new Federation of various Trade Unions in the clothing trades has, it may be noted, been recently formed.

The upward movement in the value of money, as tested by rates for loans and discounts in Lombard Street, has begun unusually early this year, several circumstances having combined to make those who work on borrowed credit particularly cautious and inclined to keep their commitments within moderate bounds. The state of affairs in the United States was, perhaps, the most potent of these influences, for there the banks have been for some time taking energetic measures to increase their cash resources and call in loans, with a view to possible pressure when the time came to move the crops and provide for the currency for their harvesting and transport. At the same time, the American banks received a strong hint from the Comptroller of the Currency to the effect that it would be advisable for them to form themselves into associations for the issue of emergency currency under the Aldrich-Vreeland Law, so that all the machinery might be ready in the event of inconvenient demands. This was a very plain indication of dangerous possibilities in the position, and though reassuring statements were at the same time circulated, in order to allay apprehension and to make it appear that the Comptroller's hint had been merely a matter of precaution, it was inevitably inferred that people do not publicly advise the preparation of the fire-engine unless they think that fire is possible. At home, though the Government's financial position is now more normal, the money market is still affected by the recent dislocation of the relations between the tax-gatherer and his victims; the balances in the Exchequer are still unusually high, and consequently the public deposits shown in the Bank of England's weekly return are (at the end of August) 8 millions above their level at the corresponding period of last year, while the other deposits, which include the bankers' balances, show a decrease of nearly $5\frac{1}{2}$ millions. Hence

it followed that the money which bankers had available to lend to bill brokers was less to this extent, and the bill brokers were consequently apprehensive that money might become "tight" at an unusually early period, and so were very shy of committing themselves by buying bills at low rates. Egypt, which always takes sovereigns from London in the autumn months to finance the movement of its cotton crop, is expected this year to be both early and extensive in its demand for gold; a small amount has already been taken, and it is more than probable that by the time these lines are in print, the Egyptian drain will have begun in earnest. India is also likely to want gold, whether in India, or in London, or in both places, as backing for the extended circulation required by its active trade. Later on will come demands from Argentina and Brazil, while Continental countries seem to be as insatiable as ever whenever they get a chance of acquiring a little of the coveted metal.

ADVERSE influences have combined to make the Stock Exchange idle and listless, with a tendency to a lower level of prices. Some theoretical observers have contended that the basic reason for the movement was the rapid increase in the gold supply and the consequent rise in the price of (or rate on) capital along with other commodities. The problems involved by this contention are too vast to be discussed here, and there are other more obvious reasons that fully account for the fall in securities. Chief among these are the state of affairs in America, the very rapid creation of new securities in the first half of the year, and the after-effects of the extraordinary outburst of speculation in rubber shares that marked its early months.

AFFAIRS in the United States have entangled themselves into an inextricable knot of uncertain possibilities, most of which are regarded by Wall Street with more or less apprehension. In the political sphere there is the disorganisation of the Republican party, hitherto the champion—as far as it dared to be so—of the vested interests and great aggregations of capital, which furnished it with material support; and the growing restiveness of public opinion on the subject of the tyranny of these interests, which makes politicians of all parties inclined to gain popular approval by attacking them. An Act giving fresh and more far-reaching powers to the Inter-State Commerce Commission to regulate the rates charged by railroads

was a great blow to the New York stock market, and came just in time to prevent the railroads from financing themselves by sales of huge blocks of securities to the Paris Bourse. Then came doubts about the cereal and cotton crops—doubts which are not settled at the time of writing—and President Taft's pronouncement in favour of tariff revision, which means a period of uncertainty in business and slackness in trade; but a deeper cause of financial distress in America is the country's relatively adverse trade balance which, being a debtor country, it cannot afford, and can only meet by more borrowing, or sales of securities abroad, and by exporting gold to fill the commercial gap. Individual extravagance has reached a pitch at which the number of automobiles bought by those who cannot afford them on borrowed money has had a serious effect in straining the credit machinery of the country, and is one of the causes of the monetary precautions already referred to.

A fall in Consols in the middle of August to 80 $\frac{1}{8}$, the lowest level touched since their conversion by Lord Goschen, has merely marked a further milestone on a road that Consols have been travelling since 1897. High taxation, high living and the discovery that many securities besides "trustee stocks" have reasonable solidity, have brought a new fashion into investment, which is now all in favour of scientific distribution of risks, and a wide horizon in selection. Probably enough, the new departure will be carried too far some day, but at present investors continue to increase their incomes by realising home securities, of which Consols are the dearest and so the most obvious for sale, and going abroad for a higher yield. The great multiplication of new securities in the first half of the year quickened the process, and the many millions which an excited public poured into rubber shares, many of which are now unmarketable, had the same effect. The rubber market has now been bringing in its first crop of disillusionment, of which, it is to be feared, there is plenty more to follow, but the well-managed and well-financed companies must be earning handsome profits even at the lower price of the product. A striking example of the present unpopularity of home investments was afforded by the failure of Home Railway stocks to respond to satisfactory earnings and dividends for the first half of the year, announced during August.

IN view of the intention announced by the Government to revise next year the whole system of Exchequer contributions to

local authorities, the Association of Municipal Corporations has issued an important memorandum on behalf of the boroughs. Before 1888 the grants in aid were appropriated to specific purposes. By the system of assigned revenues, introduced in 1888, the contribution of the Exchequer to local services depends upon the produce of certain taxes. These contributions, therefore, have no longer any direct relation to the local expenditure on the service aided. It was anticipated that the yield of the assigned revenues would grow, and this anticipation has to some degree been realised. But the expenditure of the local authorities upon the aided services has grown at a greater rate than the yield of the assigned revenues. At the same time the cost of the other services carried on by local authorities has also increased under the operation of the same causes. The Association attributes this increase to the growth of population, legislation conferring new duties and powers upon local authorities, and the increased efficiency of services. The result has been that, between 1890-91 and 1906-7, expenditure has increased by 125 per cent., and the amount of rates raised by 114 per cent., while the rateable value has only increased by 38 per cent. The memorandum given begins to show the consequent increase in rates per pound throughout England and Wales. Appended to the statement is a return showing for the years 1892 and 1908 how far in 52 boroughs the growth of the assigned revenues kept pace with the onerous expenditure of the boroughs, excluding that on education. According to these figures, the net expenditure of this class has increased by 85 per cent., while the receipts from the assigned revenues have only increased 18 per cent.

AMONG the English contributors of special papers to the International Conference on Unemployment, which is to be held in Paris, September 18-21, are Mr. A. C. Pigou, Professor of Political Economy at Cambridge, Mr. W. H. Beveridge, Director of Labour Exchanges, and Mr. N. B. Dearle, Fellow of All Souls' College, Oxford.

MR. JAMES EADIE TODD has been appointed Lecturer in Economic History at the University of Edinburgh, succeeding Mr. George Unwin. After a brilliant career at the University of Edinburgh, Mr. Todd became an Honorary Exhibitioner of Balliol College, and took First Class Honours in the Final School of Modern History at Oxford.

MR. C. F. BICKERDIKE has been appointed Lecturer on Economics and Commerce at the University of Manchester. Mr. Bickerdike is the author of two important articles in the ECONOMIC JOURNAL on *The Taxation of Site Values*, 1892, and on *The Theory of Incipient Taxes*, 1896 (commented on in the ECONOMIC JOURNAL for 1898 (p. 392). In virtue of the latter article there may be ascribed to Mr. Bickerdike the singular distinction of having said something new about Protection.

RECENT PERIODICALS AND NEW BOOKS.

The Economic Review.

Land Tenure and Political Development. REV. F. W. BUSSELL.
German and Austrian Municipal Enterprise. REV. E. A. GLENDAY.
Social Conditions and the Principles of 1834. RUTH KENYON.
Marginal Productivity. J. A. HOBSON. An answer to criticism.

Journal of the Statistical Society.

MAY. *The General Election of January, 1910.* S. ROSENBAUM. *The Correlation of Death Rates.* K. PEARSON and ALICE LEE.
JUNE. *The Statistics of Wages in the Nineteenth Century.* Part XIX. *The Cotton Industry.* Sect. V. Taking a wider range than in former Papers of the series, the writer considers changes in the structure of the industry, Factory Legislation, Collective Bargaining, and other circumstances affecting progress.
JULY. *Suggested Lines of Advance in English Vital Statistics.* T. H. C. STEVENSON.

The Nineteenth Century.

AUGUST, 1910. *Irish Ideas on Rural Reconstruction.* COL. HENRY PILKINGTON (PATRICK PERTERRAS). A glowing picture of the benefits to rural life which may be expected from the "Plunkett House."

The National Review.

AUGUST, 1910. *State Tenants in Being: An Experiment.* GILBERT PARKER. The experience recorded in the Report of the Board of Agriculture, Cd. 5180, is interpreted.

The Socialist Review.

AUGUST, 1910. *The Municipalisation of Music-Halls* is advocated by P. P. HOWE. *The Science of Banking.* AN ASSOCIATE OF THE INSTITUTE OF BANKERS. "The costly company system of management," "the failure of the State to socialise land and banking," are condemned.

The Quarterly Journal of Economics (Boston).

The Separation of State and Local Revenues. CHARLES J. BULLOCK. The advantages claimed for the plan are riddled with criticisms.
The Subjective Element in the First Principles of Taxation. F. Y. EDGEWORTH. A supplement to articles in the *ECONOMIST*

JOURNAL; with reference to Prof. Seligman's criticisms. *Control of Railroad Accounts in leading European Countries.* A. M. SAKOLSKI. *Small Holdings and Agricultural Co-operation in England.* C. R. FAY. A description and forecast. *Present Work and Present Wages.* J. G. THOMPSON. A criticism of Prof. Taussig's theories.

Political Science Quarterly (New York).

The Income-tax Amendment. E. R. A. SELIGMAN. The pending constitutional amendment is not only politically innocuous but also economically sound. *Economic Aspects of the French Revolution.* E. M. SAIT. "Up to the present no thoroughly sound history of the French Revolution has appeared." The writer hopes better things from the *Collection des documents inédits sur l'histoire économique de la révolution française*, which is in course of publication.

The Yale Review.

MAY, 1910. A tribute to the memory of the late *Professor Sumner* is paid by several distinguished colleagues or pupils. *The Holding Corporation.* M. H. ROBINSON.

Journal of Political Economy (Chicago).

MAY, 1910. *The Prices of American Stocks, 1890-1909.* WESLEY C. MITCHELL. An index-number calculated to indicate the relations between prices and business property.

JULY. *The Prices of Preferred and Common Stocks, 1890-1909.* W. C. MITCHELL. A sequel to the article in the May number.

American Academy of Political Science (Philadelphia).

MAY, 1910. This number is devoted to *Stocks and the Stock-Market*.

Journal des Économistes (Paris).

JUNE. *La séparation du capital et du travail dans la production.* G. DE MOLINARI. *Les transports.* YVES GUYOT. *Le libre-échange.* B. G. BASKETT.

JULY. *La revanche des vérités économiques.* Y. GUYOT. *Le café au Brésil.* A. D'ANTHOUD.

Revue d'Économie Politique (Paris).

JUNE, 1910. *La révolution monétaire du XVI Siècle.* E. LEVASSEUR. *L'assistance à Genève.* A. ACHARD. *La liberté du commerce des grains et le Parlement de Paris.* J. LESCURE.

Revue Économique Internationale (Brussels).

JUNE, 1910. The relation of Socialism to the Land question in Congo is discussed by ÉMILE VANDERVELDE. The *Post-bellum Economic Situation of Japan* is described by a Japanese authority; the *Austro-Hungarian Bank* by a well-informed Austrian.

JULY. General reflections on the *Economic Situation of Islam*, by A. LE CHATELIER, precede a lucid exposition of the *tobacco monopoly*, which secures the Turkish debt, by GEORGES RENARD. The *Arte di Calimala*, a corporation doing wholesale business in Florence of the XIIIth century, is reconstructed by PROFESSOR G. RENARD.

L'Économiste Français (Paris).

JUNE 25. *La Prochaine Dépopulation de la France*. PAUL LEROY BEAULIEU. The remedy against national suicide is to generalise the idea that a normal family should contain at least three children, (1) by confining State and municipal offices to fathers of three or more children (at least married officials should receive higher salaries), (2) giving a bounty (*prime*) of 500 francs for every child after the second.

JULY 30. The German census of occupations is summarised by M. A. RAFFALOVICH.

AUGUST 6. M. de Foville, referring to the recent monetary census in France, estimates the value of gold coin now in France as 6000 million francs.

AUGUST 20. *Le prix de la vie*. PAUL LEROY BEAULIEU. The rise of wheat and wine are temporary. A general rise in the price of food is not proved. Compare M. PIERRE LEROY BEAULIEU on the rise of prices, **JUNE 11**.

Le Christianisme Social (Paris).

JUNE, 1910. The new French law for workmen's pensions (*retraites*) is lucidly explained by Prof. Gide. "The new law couldn't have been avoided and could hardly be very different from what it is." . . . "Possibly one day we shall see in our Socialistic Budget (*Budget de Solidarité Sociale*), after some hundreds of millions of francs for pensions to the old, some more hundreds of millions for the benefit of the young."

Jahrbücher für Nationalökonomie (Jena).

JULY, 1910. *Arbeitslosenstatistik*. O. MOST. *Bestellbauten und Verkaufsbauten*. H. WOLFF. The old system of building houses for the proprietor to inhabit and the new system of building houses to be let or sold are contrasted. *Die Berufsgenossenschaft in Halle*. M. RUSCH. On some relations between occupation and birth-rates.

AUGUST. *Die Zukunft der Wirtschaftsgeschichte*. G. BRODNITZ. *Der gegenwärtige Stand der Kartellbewegung in Russland*. J. GOLDSTEIN.

Archiv für Sozialwissenschaft (Tübingen).

MAY, 1910. *Die Kommerzialisierung des Wirtschaftslebens*. W. SOMMART. *Die Soziallehre der Christlichen Kirchen III. Der Protestantismus*. E. TROELTSCH. *Das Gesetz der abnehmenden Bodenertrages*. J. ESSLER.

JULY. Prof. Sombart concludes the immense article begun in May on the connection between the money-market and industry; with special reference to the part played by the Jews.

Zeitschrift für die gesamte Staatswissenschaft (Tübingen).

1910. HEFT 3. *Das Gesetz der Massenproduktion*. K. BÜCHER.
Wirtschaftswissenschaft und Wirtschaftspolitik II. G. COHN.

Zeitschrift für Volkswirtschaft (Vienna).

1910. HEFT III. This is a rich number, containing appreciations of *Karl Menger* by PROF. R. ZUCKERKANDL, and of *N. G. Pierson* by PROF. VEBERLIN STUART; also a study on *Commercial Crises* by DR. J. SCHUMPELER.

Giornale degli Economisti (Rome)

- MARCH, 1910. *Sul carattere delle leggi Statistiche*. C. BRESCIANI TURRONI. *Pressione Teorica di qualunque imposta*. M. PANTALEONI. *Dazi doganali*. G. CARANO-DONUTO. *Per una Statistica delle Assicurazioni*. A. BENEDUCE. *Sulla "Boule de Neige."* L. AMOROSO.
- APRIL. *Sindacati fra Aziende*. G. ANAS. A study in Trusts; with reference to the distinction between simple and complex (collective) monopoly. *Delle coalizioni operaie. I*. F. CHENA. The power of workmen's combinations to raise wages is discussed.
- MAY. *La finanza del nuovo regno d'Italia*. G. CARANO-DONUTO. The financial system adopted by the kingdom of Italy proves burdensome to the rural population of the South. *Il quarto Canone di Stuart Mill*. L. AMOROSO. Mill's proposition that demand for commodities is not demand for labour is discussed. *Delle coalizioni operaie* (continued). F. CHENA. *Sulla applicazione delle medie a serie statistiche*. O. G. DEL VECCHIO.

NEW BOOKS.

Belfast, Queen's University of. Lectures. No. I., Irish Linen, with some features of its Production. SIR WILLIAM CRAWFORD. No. II., Recent History in Ireland, with Special Reference to the Industrial Movement. A. G. WILSON.

Brazil: its Natural Riches and Industries. Vol. I., Productive Industry. Paris: Ailland. 1910. Pp. 384.

[An interesting historical and geographical summary, introducing a series of industries.]

COOPER (SIR W. E.). Britain for the Briton. London: Smith, Elder and Co. 1909. Pp. xix + 390. 10s. 6d. net.

["Free trade is a veritable jumble of paradoxes and economic inconsistencies,"]

CHAPMAN (PROF. S. J.). Home Work. (Presidential Address to the Manchester Statistical Society.) Manchester: Heywood. 1910. Pp. 109.

[Statistics—in which among very diverse rates of wages the *most frequent*, and the numbers at that rate, are specified—show a considerable fringe of homework miserably paid and done under the worst conditions. The explanation is not only low marginal worth, but also a weakness of strategic position causing some homeworkers to get less than their marginal worth. Follows a discussion of remedies: (1) Prohibition of Home Work; (2) Regulation on the Analogy of Factories; (3) Licensing; (4) Wage-Boards, which "will probably prove more serviceable than might at first be supposed."]

CURTIS (C. E.) and GORDON (R. A.). *A Practical Handbook upon Agricultural Tenancies*. London: Lockwood. 1910. Pp. 323.

DAWBARN (C. Y. C.). *Social Contract*. London: Green. Pp. 152.

DICKSEE (L. R.). *Business Organization*. (Commercial Series.) London: Longmans. 1910. Pp. 283. 5s.

EDWARDS (REV. G. Z.). *A Vicar as Vagrant*. London: King. 1910. Pp. 32.

Farming in Canada. Edinburgh: London: W. Blackwood and Sons. 1909. Pp. 195. 1s.

[The report of a Scottish commission on agriculture which was sent to Canada in 1908.]

GRICE (J. WATSON). *National and Local Finance*. With a Preface by Sidney Webb. London: King. Pp. xxiv + 404.

HERBERT (EDWARD C.). *Newæra. A Socialist Romance*. With a chapter on Vaccination. London: King. 1910. Pp. 212.

[An amusing picture of a Socialist Community started by a well-meaning employer, and proving unworkable.]

HIGGS (MARY) and HAYWARD (EDWARD E.). *Where Shall She Live?* London: King. 1910. Pp. 216.

JEVONS (W. STANLEY). *The State in Relation to Labour*. Edited by F. W. Hirst. Fourth edition. London: Macmillan. 1910. Pp. 174.

[Mr. Hirst contributes an appreciative Preface; but he is not prepared to accept his author's unqualified utilitarianism; nor can he understand how it can be true that free trade and protection "depend for their validity upon time, place, and circumstance."]

KELTIE (J. S., editor). *The Statesman's Year-Book for the year 1910*. London: Macmillan.

[The forty-seventh annual fully maintains the reputation of its predecessors. Among new topics of economic interest may be mentioned reference to old age pensions in France and the results of the Census of Production.]

MALLOCK (W. H.). *The Nation as a Business Firm*. London: Black. 1910. Pp. 268.

[“An attempt to cut a path through jungle” is the author's conception of the work.]

REA (RIGHT HON. RUSSELL). *Imports and Employment*. An Economic Note. London: Cassell. 1910. Pp. 20.

[“Foreign imports do not reduce home employment and cannot do so.”]

ROW-FOGO (C. A.). *Some Notes on the Recent Depreciation of Gilt-edged Securities*. Edinburgh: Blackwood. 1910. Pp. 8.

[A rise in the general rate of interest is attributed to a rise in general prices consequent on increased gold supplies.]

SHAW (B.). *Socialism and Superior Brains: a reply to Mr. Mallock*. London: King. 1910. 1s.

MEYER (H. R.). *The A B C of Commerce*. London: Simpkins. 1910. Pp. 130.

[A text adapted to the requirements of students and clerks.]

UYEHARA (G. E.). *The Political Development of Japan, 1867-1909*. London: Constable. 1910. Pp. 296.

American Economic Association. Papers and Discussions of the Twenty-Second Annual Meeting. Cambridge, Mass.: American Economic Association. 1910. Pp. 383.

[Among the papers followed by discussion may be noticed Prof. Taussig's *Outlines of a Theory of Wages*, questioning the existence of a "separate or specific product of capital." "The wasting can hardly be said to produce anything; it simply enables labour to produce more." Prof. Seligman showed the *progress of Taxation during the past twenty-five years, and its present tendencies*, contending that the doctrine of ability as now reinvigorated is superior to any of the rival conceptions. Prof. Pantaleoni introduced the subject of *Economic Dynamics*; Mr. Francis Walker, *The Causes and Remedies of Trusts*. There was a "Round Table" discussion on the *Problems of Country Life*, in which Sir Horace Plunkett, Mr. James Bryce, and Prof. T. N. Carver took part.]

BALCH (EMILY). Our Slavic Fellow Citizens. New York: (Charity Publication Committee.) 1910. Pp. 512.

[The author is Associate Professor of Economics in Wesley College, Massachusetts. Her account of the Economic Situation of the Slav in America and her analysis of the reasons why the effect on the labour market has not been more depressing reward study.]

LOUGH (W. H.). Corporation Finance. An exposition of the principles and methods governing the promotion, organisation, and management of modern corporations. New York: Alex. Hamilton Inst. 1910. Pp. xx + 480.

[Vol. IV of the Modern Business series. The author is professor of finance and transportation in New York University School of Commerce.]

KINLEY (D.). The Use of Credit Instruments in Payments in the United States. A Report to the National Monetary Commission. (Senate Doc. No. 399, 61st Cong. 2d sess.) Washington: National Monetary Commission. 1910. Pp. 219 + tables and diagrams.

[Over 90 per cent. of the country's wholesale business is done by means of credit instruments.]

MYERS (G.). History of the Great American Fortunes. Vol. II. Great Fortunes from Railroads. Chicago: Kerr. 1910. \$1.50.

REID (D. C.). Effective Industrial Reform. Stockbridge, Mass.: Author. 1910. Pp. 282 and index. \$1.35.

[The whole people are to organise into one large business corporation, distinct from the State, conducted for the interest of the stockholders.]

SEAGER (PROF. H. R.). Social Insurance. A Programme of Social Reform. (American Social Progress Series.) New York: Macmillan Co. 1910. Pp. 175.

WRIGHT (C. W.). Wool-growing and the Tariff. A Study in the Economic History of the United States. Boston: Houghton Mifflin Co. 1910. Pp. 362.

[A survey of wool growing and woollen manufacture points to the conclusion that "the tendency to overestimate the power of the tariff, either for good or evil, is almost universal."]

BOURGEOIS (L.), ADAM (P.), and others. La misère sociale de la femme, d'après les écrivains et les artistes du XVII^e au XX^e siècle. Paris: Devambez. 1910.

D'AVENEL (G.). Histoire économique de la propriété, des salaires, des denrées et de tous les prix en général depuis 1200 jusqu'en 1800. Vol. V. Les classes riches et bourgeoises. Paris: E. Leroux. 1910. Pp. 732. 20 fr.

DAVIES (J.), HAILEY (C. P.). *Prédictions sur le commerce en 1910.* Paris: Pigier. 1910. 6.50 fr.

LANDRY (A.). *Essai Économique sur les mutations des Monnaies dans l'Ancienne France.* Paris: Champion. 1910. Pp. 216.

MAHAIM (ERNEST). *Les abonnements d'ouvriers sur les lignes de chemins de fer Belges et leurs effets sociaux.* (Institute Solway.) Brussels: Misch & Thron. 1910. Pp. 259.

[An investigation conducted largely by personal inquiry into the system of cheap railway tickets for workmen which prevails in Belgium—its diverse influences on the mind and character of the workers, as well as the purely economic effects, the utilisation of resources and the perfection of the labour market.]

BORCHT (R. VAN DER). *Beruf, gesellschaftliche Gliederung u. Betrieb im Deutschen Reiche.* Vortrag. Leipzig: Teubner. 1910. Pp. 138. 2.80 m.

DUNKER (DR. RUDOLF). *Wirtschaftstudien aus Südamerika speziell über Chile.* Leipzig: Duncker und Humblot. 1910. Pp. vi+202.

[The author is a Bank official who was in Chile for four years and had opportunities for making economic studies on the spot. He deals fully with the finances of Chile, and also considers the products of the soil, and commerce and industry.]

EPHRAIM (DR. HUGO). *Die Stadt Oldenburg im sozialstatistischen Beleuchtung.* (Zeitschrift für die gesamte Staatswissenschaft: Ergänzungsheft xxxiv.) Tübingen: Laupp. Pp. 126.

GOEHTS (PAUL). *Berlin als Binnenschiffartsplatz.* Leipzig: Duncker und Humblot. 1910. Pp. 183.

LEDERER (PAUL). *Die Entwicklung der südatrikanischen Union auf verkehrspolitischer Grundlage.* Leipzig: Duncker und Humblot. 1910. Pp. 165.

LOTZ (W.). *Verkehrsentwicklung in Deutschland, 1800–1900.* Dritte Auflage. Leipzig: Teubner. 1910. Pp. 141.

[A new edition, brought up to date, of a useful work first published in 1900.]

SCHMIDT (DR. GEORG). *Kredit und Zins.* Leipzig: Duncker und Humblot. 1910. Pp. 52.

JAFFÉ (EDGAR). *Das Englische Bankwesen.* Leipzig: Duncker und Humblot. 1910. Pp. 370.

[Developments subsequent to the first edition, in particular the American crisis, are noticed.]

VOUTERS (DR. H.). *Le petit commerce contre les grands magasins et les coopératives de consommation.* Paris: Rousseau. 1910. Pp. 205.

WEYERMANN (DR. M.). *Zur Geschichte des Immobiliarkreditwesens in Preussen.* Karlsruhe in Baden: G. Braunsche Hofbuchdruckerei und Verlag. 1910. Pp. xiv+239.

[Much of the soil in many of the German States is heavily mortgaged. How can it be redeemed? And how did the burden of debt arise? Dr. Weyermann attempts to answer these questions, limiting his researches to Prussia. His starting point is 1620, and he uses many unpublished sources.]

SUPINO (C.). *Il Mercato Monetario Internazionale.* Milan: Hoepli. 1910.

LORINI (E.). *La Republica Argentina.* Vol. III. Rome: Loescher.

PRATO (G.). *Il Protezionismo Operaio.* Turin: 1910. Pp. 236.

[On restrictions of Immigration.]

THE ECONOMIC JOURNAL*

DECEMBER, 1910

ECONOMIC SECURITY AND UNEMPLOYMENT INSURANCE.¹

So far we have only been dealing with the apparatus and methods of research and exposition, and not at all with the objects to which such research should be applied, still less with the ultimate ends of economic study and conduct.

The next tendency we have to note belongs to quite another region of ideas. This is the growing emphasis laid on ends as distinguished from means as the subject of economic study.

There used to be some disposition to question whether the economist was at all concerned with ends, whether he had not fully discharged his duty in making a correct analysis of the structure of existing economic society and of the forces acting upon it; and it was rather the fashion to suggest that when this analysis was completed the economist should depart, and leave the practical statesman to collate his report with those of the moralist and the politician, and to draw the necessary inferences as to practical policy from their combined study.

Such a limitation as this would have been quite foreign to the ideas of the early makers of political economy. The mediæval

¹ Part of the address given to the Economic Science and Statistics Section by Sir H. Llewellyn Smith, K.C.B., President of the Section, at the Meeting of the British Association for the Advancement of Science in Sheffield, 1910. In order to concentrate attention on the topic which is of most immediate practical importance, we have not reproduced the President's introductory remarks on apparatus and methods of research, on the controversy between the advocates of different methods, on the uses and limitations of technical terminology and mathematical conceptions, on the increasing stress laid on quantitative measurement and other matters. Our readers will find this part of the Address printed *in extenso* in the Report of the British Association for 1910.—EDITOR.

thinkers were frankly concerned with economic conduct and morals; the mercantilists with the very practical question of adapting economic policy to the race for national power; the physiocrats with the freeing of pre-revolution France from the network of vexatious and oppressive State restrictions on industry with a view to giving free play to the natural expansion of manufacture and commerce. Malthus was engaged in combating social utopias, while Adam Smith was concerned, as we have been recently reminded in Professor Nicholson's striking book, with every field of political and moral activity, as well as with that region within which economic science is usually supposed to be confined. The author of the "Wealth of Nations" would certainly have been astonished at the suggestion that political economy is not concerned with ends. Yet the first step towards at least a temporary divorce between the study of economic ends and means was taken when Adam Smith enunciated his famous conclusion that "all systems, either of preference or of restraint . . . being . . . completely taken away, the obvious and simple system of natural liberty establishes itself of its own accord."

I am not concerned to discuss whether this conclusion was an induction from experience or a deduction from moral or theological presuppositions, or how far it is to be qualified by many other passages in the same great work. But in any case the proposition that the natural forces of human desires and aversions, and their mutual reactions, will naturally and without conscious intention on the part of the individual lead to the greatest advantage of society, became the starting-point of a school of propagandists of economic truth who too often identified the indicative with the imperative mood, and blurred the distinction between scientific generalisations and moral precepts of conduct.

To those who adopted this view of the Economic Harmonies in its extreme form the question whether political economy is concerned with ends as distinct from means became a relatively unimportant question, and fell naturally into the background.

The maximising of production (or, as we should now say, of the national dividend) is the only end that these economists could be said to propound, the distribution of the resultant wealth being automatically determined by the beneficent action of the "system of natural liberty." Sooner or later the current utilitarian philosophy, with its principle of "greatest happiness," was bound to come into conflict with this ideal, for the policy of maximising satisfaction is clearly not identical with that of maximising production. The enunciation of "maximum satisfaction" as an end

necessarily raised—though it could not solve—the question of distribution of wealth among different social classes. In regard to this matter it shook confidence in the shallow dogmatism of the propagandist economists, but it substituted no definite alternative commanding general assent, and accordingly the immediate practical result on economic thought was not to inspire it with a new creed, but to deprive it of all creed, and to replace the art of political economy by the conception of an economic science concerned solely with the ascertainment of the results which flow from certain hypothetical assumptions, and not at all with guiding mankind towards a desirable goal.

Such a view could hardly hold permanent sway, though it was a great advance on the dogmatic and insolent optimism which it displaced, and nominally at least it dominated English economic thought from the middle of the nineteenth century almost to the present day. This domination has, however, been more nominal than real. The limitation was from the first subjected to vigorous criticism, and at bottom the critics were right, for however carefully we may expel the idea of ends from our reasoning, current ideals and even prejudices are certain to affect our choice of hypotheses. As a fact, all the latter-day economists have by one expedient or another escaped from their own theoretic limitation. To take a single example, it has become a recognised axiom of economic reasoning that the diminution of poverty is a proper object of economic effort. Of course, the pure utilitarian would have nothing to do with distinctions of quality in happiness—distinctions which are fatal to the simplicity of his magic formula—and the utilitarian school of economists attempted no direct discrimination in their measurements of utility and value between the qualities which render an article an object of desire. The fact that a thing is desired proved its right to be called "useful" within the meaning of their theory, and it must be admitted that no coherent objective theory of value could be built up on any other basis. Nevertheless, it is no new discovery that things of equal value to the individuals who possess them at a given moment may conduce in very different degrees to the ultimate national advantage. The old distinction between productive and unproductive expenditure, and Adam Smith's difficult argument as to the relative advantages of near and distant trade, are examples of distinctions of this kind which were present to the minds even of the economists who were most dominated by the theory of natural liberty.

The great and growing importance attached by the best modern

economists to the element of time, and the consequential recognition of the importance of ultimate as distinct from immediate effects, tend *pro tanto* to discriminate between different qualities of satisfaction, and to give increased weight to those kinds which tend to the building up and husbanding of the permanent economic interests of the Commonwealth, as compared with the transitory satisfactions which perish in their own gratification—in short, between the nobler and ignobler forms of utility.

I think it is a matter which needs the careful consideration of economists at the present day, whether the time has not come when they should accept fully and frankly the task, from which in any case they cannot entirely escape, of distinguishing between noble and ignoble ends of economic conduct, and should regard all their methods of research—historical, analytical, comparative, and statistical—as only means to this end.

On the present occasion I cannot do more than illustrate my meaning by a single important example.

The recognition that the purposes and modes of consumption of commodities have to be taken into account, as well as the mere amount of satisfaction yielded by them to their consumers, brings with it the necessity for recognising the distribution of income in respect of time, no less than in respect of class, as an essential factor in the national well-being.

Thus, for example, a regular income of £2 a week may have a very different economic significance from an income amounting in the aggregate to £104 in the year, but receivable in irregular and unequal instalments. Still more widely does it differ economically from the chance of a variable annual income averaging £104 one year from another.

Now one of the most significant and important economic tendencies of the present day is the growing recognition of the importance of security and regularity in all operations of industry and commerce. It is, of course, a trite commonplace that the foundation of commerce is security—that safety of person and property and security for the performance of legal obligations are essential conditions of all industrial and commercial development. But it is not of these elementary guarantees that I am speaking, but of the tendency which I see to attach ever greater importance to the certainty and regularity of sequence as distinguished from the mere aggregate volume of business transactions. This tendency is reflected in the enormous development of the method of insurance as a protection against risk.

Nor is this development confined to business transactions properly so-called. A number of the risks and contingencies of

human life which cause irregularity and uncertainty in working-class incomes have been brought within the sphere of insurance, whether by voluntary institutions or, as in Germany, by a State system of organisation. And the question of the perfection and further development of the methods of social insurance is absorbing a large amount of the best thought of the day.

All this points to the growing importance attached by social observers to stability and regularity, and the grounds for this attitude are sufficiently obvious, whether we look at the matter from the point of view of the economy of the workman's household, or of the deteriorating effects of irregular habits on physique and character. It may perhaps be suggested that the growing social concern for the maintenance of stability is the counterpart of the growing conviction that with the world-wide development of industry the causes of fluctuations and irregularity are becoming continually more incalculable and their effects more unavoidable by unaided individual effort.

Is this tendency to exalt security as an end to a healthy tendency, or ought it to fill us with apprehension?

The ideal of security may not at first sight seem a very heroic aim to put before a country whose economic traditions form a veritable romance of adventure, full of the joy of risks encountered and dangers overcome. Some may think with misgiving that the conscious pursuit of a policy of safety implies that we have passed the stage of economic youth and expansion and are entering on the dusk of old age. They may feel as when at Rome we contemplate Aurelian's great wall which for centuries withstood the inroads of barbarians, but the building of which none the less marked the definite close of the period of the fearless and aggressive supremacy of Rome. Are the nations of Europe being invited to enter with the old gods into the fortress of Valhalla, there to await in well-planned security but in growing gloom their inevitable decline? The question is cogent and searching, and modern nations must find the true answer at their peril, for if the two ideals of free adventure and economic security admit of no reconciliation, then the fate of our civilisation is only a matter of time.

But fortunately it is not necessary to admit the essential opposition of these two ideals rightly conceived. For as it seems to me there is a noble as well as an ignoble ideal of adventure, and, corresponding thereto, there is a noble as well as an ignoble ideal of security, and the great problem that lies before us in the future is to distinguish rightly between them and to direct our national policy accordingly.

The first step towards making this distinction is to recognise

that ignoble as well as noble results are produced by exposure to risks. If fearless resolution and foresight in encountering and combating danger and risk produced the race of Elizabethan mariners and explorers, and to-day gives us a Shackleton or a Sven Hedin, we know also the craven and panic-stricken population which lives on the slopes of a volcano, exposed every day to incalculable risks against which no precautions can avail.

It is, I think, a definite induction from history and observation that when risk falls outside certain limits as regards magnitude and calculability, when, in short, it becomes what I may call a gambler's risk, exposure thereto not only ceases to act as a bracing tonic, but produces evil effects of a very serious kind.

It is to the general interest, and it tends to the building up and strengthening of the national character, that everyone should have as strong a motive as possible to guard against risks which can be avoided by reasonable precautions on the part of the individual, and it is also to the general interest that within certain limits the individual should have sufficient resisting power and reserve strength to encounter without the support of his fellows the ordinary minor ups and downs of life which it is not within his power to avoid. What these limits are cannot be laid down dogmatically: they vary widely from nation to nation, from class to class, and from age to age. Vicissitudes which mean famine to the savage pass quite unnoticed in advanced industrial communities, and classes who are accustomed to yearly salaries are unconcerned with fluctuations which bring privation to the weekly wage earner. But within any given nation and class the limits probably change but slowly, and though different schools of social observers will certainly fix the limits at somewhat different points, and there is no doubt a neutral zone within which the relative public advantages and disadvantages of exposure to risk are fairly equally balanced, or at least may be open to legitimate debate, I am disposed to think that the majority of fair-minded men would not differ very widely in the principles governing the demarcation between the spheres of individual and of social protection against economic risk.

To take, for example, the risks of unemployment, I think most people would agree that the personal risk of losing employment through bad work, irregular attendance, or drunken habits is one which it is absolutely necessary in the public interest to leave attached in all its forces to the individual workman. For the community to guarantee employment to all irrespective of personal effort or efficiency would necessarily impair the national

character and lower the national standard. This is, therefore, a risk the direct incidence of which must be borne by the individual, the action of the community being confined to such indirect measures as may strengthen the power of the individual to meet the risk, as, for example, by technical and general training.

On the other hand I think that most people would agree that in a country like the United Kingdom at the present time, the incalculable risk of a prolonged depression of trade, due perhaps to some financial catastrophe thousands of miles away, is one the exposure to which of the individual workman does little but harm. Such a risk is too much beyond his powers of foresight, and also too great in magnitude in proportion to his reasonable opportunities of making provision, to exercise any appreciable effect in stimulating self-help, while the liability to see all his savings swept away in a few weeks by cyclical fluctuations in employment which he can do nothing to avoid is a demoralising risk, acting on his character precisely like the liability to earthquake or other cataclysm, and discouraging to a marked extent the accumulation of savings and the development and maintenance of habits of providence.

Between these two extremes, the risk due to personal inefficiency and that resulting from a world-wide depression of trade, lie intermediate classes of risks about which there might be more difference of opinion, and the incidence of which probably acts on national character in very different ways in countries at different stages of development.

I propose presently to examine more closely some of these classes of risks. At the moment, however, I am only concerned to illustrate my general proposition that neither free adventure nor economic security suffices singly as an ideal of economic conduct without careful discrimination, and that the criterion for such discrimination is the effect of exposure to each class of risk in building up or degrading the national character.

In suggesting that the attention of economists is being directed and will continue to be directed in an increasing degree to the ends of economic conduct as distinct from a mere analysis and description of existing conditions, I have taken a single example, the pursuit of economic security as an objective, and have drawn a vital distinction between the classes of economic risks exposure to which tends to the building up or to the degradation of the national character. And as regards these risks, I have taken a single illustration, that of unemployment, partly because the evils resulting therefrom have been very much in our thoughts during

the last few years, partly because their analysis affords good illustrations of almost every class of economic risk.

I might go on to take other examples, but I think that it may perhaps serve a more useful purpose if during the time that remains to me I follow up in further detail the particular illustration which I have chosen, and inquire specifically how far the risks of unemployment are risks which it is expedient in the public interest that each individual should be left to meet unaided, or how far they are, from the social point of view, "insurable risks" which can properly be met by combined action.

We shall find that the reply to the proposition is by no means a simple one, that it will differ to a large extent for different trades, and that probably it will also differ widely for different countries.

At the outset it is to be noted that I use the term "insurable risk" for the purpose of this inquiry in a much narrower sense than that which it bears in the ordinary language of the insurance world. Broadly speaking, if the term be used in its widest sense there are no risks that are not insurable except those which are the result of the direct wilful act of the insured person. Thus you can insure against fire but not arson, against death but not suicide. And even with regard to acts which are voluntary the modern tendency is to take a very broad view, and to narrow the classes of cases excluded. Thus most life assurance companies will pay on death, even if due to suicide, provided that the policy was taken out sufficiently long before the death to make it fairly certain that suicide was not in contemplation at the time.

As I am now using the term "insurable," however, I mean not merely a risk in respect of which you could get some company or underwriter to quote you a premium, but a risk for which some sort of social insurance is a practicable and appropriate remedy—bearing in mind the critical distinction already drawn, between different classes of risks.

Moreover, by "insurable risk" I do not mean a risk which can be fully covered by insurance, but one the consequences of which may be mitigated by a payment which nevertheless falls far short of complete indemnity. It hardly needs demonstration that full indemnity against the risks of unemployment could not be offered without disastrous results, inasmuch as a large section of persons regard idleness as in itself more attractive than work. The general practice of organisations, voluntary or public, which insure against sickness, accident, or unemployment, is to make the benefit payable much less than the full rate of wages, and in all that follows this condition is assumed.

For the purpose of the present inquiry the causes of unemployment group themselves naturally under three heads—periodic fluctuations, local and industrial displacements, and personal causes.

Of these I have already touched on the first group in discussing cyclical and seasonal fluctuations of employment. Seasonal changes are, of course, the direct result of cosmical causes, and whether or not cyclical fluctuations are ultimately psychological or (as Jevons thought) cosmical phenomena, there can be no doubt that for our present purpose we may regard them as ultimate facts beyond the control of the individual. These two elements in unemployment are pre-eminently insurable elements, since, being due to recurrent oscillations and not to progressive changes, they can only be met by some method, either individual or collective, of spreading the earnings of good periods over good and bad alike, and not by any remedy which aims at altering the permanent relation between the demand for labour and the supply. Moreover, of the two alternative methods, collective insurance is more appropriate for the purpose than individual providence, because while the oscillations are fairly well defined, their intensity and (in the case of cyclical fluctuations) their wave length are affected by many uncertain elements, climatic, financial, industrial, and political, which are incapable of exact prediction, and (what is even more important) the personal incidence of the unemployment due to the oscillations is uncertain.

The next group of causes includes changes in industrial processes or methods, or in the local distribution of industries, or in the character of industrial demand. How far are these classes of risks properly insurable?

As regards local distribution, the answer depends on the scope of the insurance scheme. No purely local fund can, of course, compensate a workman for the shifting of his industry to other districts, without incurring ruinous expense besides impairing the mobility of labour. If, however, the insurance scheme be national in scope and be worked in conjunction with systematic machinery for notifying to the workman the existence of vacancies in other districts, the risk of unemployment due to local displacement is clearly an "insurable" risk. As no national scheme could embrace a wider area than the United Kingdom, the above argument does not apply with its full force to the risk of displacement of industry by foreign competition, and this case needs separate treatment. It is undoubtedly a risk beyond the individual's control, and it has therefore, one of the essential marks of an insurable risk;

and if the scheme embrace a large group of trades of sufficient variety to insure each other against the risk of some particular branch being attacked by foreign competition, there is no reason why this class of risk should throw an excessive burden on a national fund. The only question to be considered is, therefore, whether the insurance of British workmen in an industry liable to be transferred by competition to a foreign country will operate prejudicially by checking industrial mobility, there being obviously not the same opportunity for the workman to follow the work as in the case of local redistribution of industry within the limits of the insuring country.

In this respect the case we are now considering is on all fours with that of a trade decaying through a permanent change of industrial demand, or an alteration of industrial processes. If there is appreciable mobility of labour between the decaying trade and other healthy branches embraced within the scope of the insurance scheme, and if its magnitude is small as compared with the total area of industry covered by the scheme, then the risk is fairly insurable. If, however, these conditions are not fulfilled, the case of the permanently decaying trade may present a real though by no means insuperable difficulty which will have to be carefully borne in mind by those responsible for devising and working any unemployment insurance scheme.

The conclusion seems to be that the extent to which the risk of unemployment due to industrial and local displacement is properly insurable depends partly on a wise choice being made of the group of trades and of the geographical area to be embraced by the scheme, partly on the judicious limitation of the benefits payable thereunder. Our analysis points to the necessity of a large area, both geographical and industrial, and further suggests that the groups of trades included should be such as are unlikely as a whole to undergo wholesale and rapid displacement, and within which any decay to be apprehended is likely to be only local and partial and not on a scale too great to be compensated by the expansion of other branches of trade within the insured group.

There remain the risks due to personal causes. Of these we have already ruled out the risks due to the wilful act of the workman, and to these we must now add the personal risk attributable to exceptional deficiencies, physical, mental, or moral. These are not properly trade risks, the burden of which ought to fall in a special degree on those following a particular industry, and if they were allowed to do so, they would ruin any scheme

of insurance based on the trade group. There is still, however, one important class of personal risk to which all are liable, and which is in the main beyond the control of the individual, viz., the increasing liability to unemployment due to advancing years. I do not intend to trench on the important but quite separate problems of national provision for old age and invalidity as such. I am solely referring to the ascertained statistical fact that the chance of unemployment is a function of age, and that beyond a certain age the risk is materially increased. For example, among a body of nearly eight thousand engineers whose industrial records were analysed for the purpose, I found that whereas the average number of working days lost in the year by the whole body was fifteen, that for members below the age of forty-five was less than twelve, while for members between the ages of forty-five and fifty-five it was twenty, and for members between fifty-five and sixty-five, thirty-three. (Above sixty-five the figures are affected by superannuation.) The question we have to ask is, how far this class of risk is insurable?

The answer depends again on the scope of the scheme. A voluntary scheme which workmen are free to join and leave at their pleasure cannot deal satisfactorily with a risk of this kind, especially as no scheme of graduating contributions according to age is likely to be administratively feasible. Trade unions which give unemployment benefit are in an exceptional position, because they exist primarily for trade protection purposes, and hence have a hold on their members which no voluntary insurance scheme pure and simple could possess. Generally speaking, personal unemployment due to advancing years is insurable, and only insurable, under a scheme which applies compulsorily throughout the whole period of the workman's industrial life.

It results from our analysis that some of the risks of unemployment are properly insurable and others are not, and the next step is to ascertain broadly the relative importance of the insurable and non-insurable elements. Now an examination of the available statistics indicates clearly that at all events as regards certain large groups of trades in which unemployment is acute—namely, the building, engineering and shipbuilding trades—the insurable element in the risk of unemployment predominates largely over the non-insurable element.

The method of statistical proof of this proposition may be indicated as follows:—

1. The percentage of unemployment in these trades—taking an average of good and bad years together—has not varied very

widely during the period of fifty years during which the statistics have been collected (the average for the first decade of the period was 5·6; for the second, 4·5; for the third, 6·8; for the fourth, 5·2; and for the fifth, 7·2. The average for the whole period was 5·9). As the period of oscillation is not exactly ten years, part even of the differences shown above is accounted for by the presence of an excessive proportion of good or bad years in particular decades. Thus we may fairly say that the element of unemployment due to progressive expansion or contraction of the demand for labour has been relatively small.

2. The percentage of unemployment found during the seven best years of the cycles has averaged 2·4, and only in two out of these seven years has it diverged by more than unity from this average.

3. The variation between the worst and the best years of the various cycles has averaged 8·5 per cent.—*i.e.*, more than three times the average percentage of unemployment in good years.

Now, broadly speaking, if we neglect any progressive changes in the total demand for labour, which are evidently slight as compared with the intensity of the periodic fluctuations in that demand, we may say that the percentage who are unemployed in years of good employment gives a maximum limit which the voluntary or non-insurable risk cannot exceed, since it also includes a number of minor accidental risks which are properly insurable—*e.g.*, the risk of unemployment through a fire or other accidental stoppage of work, or through defects in the local distribution of work and labour. Moreover, through the method of averaging employment over the year, the risk of seasonable want of employment is included, and this is mainly an insurable risk.

We may further regard the difference between unemployment in a good and bad year as giving a minimum measure of the insurable element in unemployment, since this difference is wholly the result of changes in the demand for labour; and is independent alike of the choice of the individual and of the gradual progressive changes, if any, that affect the total field of employment. Hence, as this difference is much greater than the minimum percentage in a good year, we may regard our proposition as being proved.

But at this point it is necessary to forestall and reply to an objection that will certainly be taken to the proposition just laid down. It will be pointed out that the experience of all relief works and of all schemes for the relief of distress due to unemployment establishes clearly that the great majority of the

unemployed, or at least those who seek relief from distress, are very markedly inferior both as regards their industrial capacity and their physical and moral qualifications to the average employed workmen in the same trades. It is possible in a large number—probably in the majority—of these cases to trace clearly the operation of the personal defects which have contributed to unemployment—bad time-keeping, drink, slovenly work, and so forth—and those who are most familiar with the personal side of the problem are, I think, likely to put the personal or non-insurable element in the risk of unemployment very much higher than I have done in relation to the involuntary insurable element.

But in this criticism there is, I think, confusion of thought. Of course, if fifty men out of every thousand are out of work, those fifty individuals are likely to be less eligible than any other fifty taken at random. We might, if so disposed, construct a geometrical curve like those used in expounding the doctrines of utility and rent in which the number of workmen employed is expressed by abscissæ and the degrees of efficiency by ordinates. Then it will appear at a glance that in a time of good trade the efficiency of the "marginal" labourer—that is, of the worst man who just manages to retain his employment—is necessarily less than when the total demand for labour has shrunk from any cause. In the latter case the workmen discharged will for the most part be the less eligible section; and this state of things is quite independent of the true cause of the shrinkage in the demand for labour, so that while the personal defects of A may be the decisive reason why he is selected for unemployment instead of B, it does not necessarily follow that these defects are a principal or even a contributory cause of his unemployment.

It is a very complex and difficult question, only to be determined in any given case with full regard to all the circumstances, to what degree the increase or decrease of the personal efficiency of the labourer conduces to an increase or decrease in the total demand for labour, or to what degree it merely enables him to shift the burden of unemployment on to someone else. Broadly speaking, there is no doubt that the total demand for labour is to a material extent dependent on its average efficiency. For example, a quite new demand for labour would be created if it were possible to level up all the feeble-minded and the physically and morally defective members of the community to the normal level. The abnormal defects of these persons (the true unemployables) are the *vera causa* of their unemployment, which does not in the main result from any deficiency in industrial demand,

but from the fact that their services are so worthless relatively to that of the normal workman, that to all intents and purposes they may be regarded as an industrially useless surplus. Their unemployment is, therefore, emphatically not an "insurable risk," and they would need to be excluded from the scope of any scheme of insurance as rigorously as exceptionally bad lives are excluded from life and sickness insurance.

But if we put aside the comparatively small section of abnormals, there is ground for asserting that at all events within the great groups of trades to which I have already referred the influence of variations in efficiency among ordinary normal workmen on the total demand for labour at any given time, though by no means negligible, is not nearly so powerful as that of variations in industrial conditions which are beyond the control of the individual workman.

If, then, the insurable elements in unemployment in these trades largely predominate over the uninsurable elements, it would be comparatively simple to devise an appropriate scheme for dealing with the evil, if every separate case of unemployment could be readily assigned to its appropriate category, so that the benefits of the scheme should be exclusively available in the case of unemployment falling within the insurable category, just as a policy of marine insurance excludes in terms losses due to a number of specified causes. But in actual practice I need hardly say that any such separation of causes can only be made to a very limited extent. In the real world of industry the various elements that contribute to unemployment are inextricably intermixed. We can imagine the case of a carpenter who with equal truth might ascribe his unemployment to the competition of structural steel, to the general trade depression, to the severity of the winter, to local over-building, or to the defects in his own training.

There are a few, but only a few, of the causes of unemployment which can be definitely distinguished and excluded in terms from the benefit of an insurance scheme, such, for example, as holidays, strikes, lock-outs, voluntary leaving of a situation, sickness, and crime. If, then, it is necessary, as it certainly is for the success of a scheme, that it should discriminate against unemployment due either to exceptional defects or to causes within the control of the individual, this discrimination must be effected automatically in the course of the working of the scheme itself rather than by any rule professing to exclude ineligible cases from its scope.

The crucial question from a practical point of view is, therefore, whether it is possible to devise a scheme of insurance which, while nominally covering unemployment due to all causes other than those which can be definitely excluded, shall automatically discriminate as between the classes of unemployment for which insurance is or is not an appropriate remedy.

We can advance a step towards answering this crucial question by enumerating some of the essential characteristics of any unemployment insurance scheme which seem to follow directly or by necessary implication from the conditions of the problem as here laid down.

1. The scheme must be compulsory, otherwise the bad personal risks against which we must always be on our guard would be certain to predominate.

2. The scheme must be contributory, for only by exacting rigorously as a necessary qualification for benefit that a sufficient number of weeks' contribution shall have been paid by each recipient can we possibly hope to put limits on the exceptionally bad risks.

3. With the same object in view there must be a maximum limit to the amount of benefit which can be drawn, both absolutely and in relation to the amount of contribution paid; or, in other words, we must in some way or other secure that the number of weeks for which a workman contributes should bear some relation to his claim upon the fund. Armed with this double weapon of a maximum limit to benefit and of a minimum contribution, the operation of the scheme itself will automatically exclude the loafer.

4. The scheme must avoid encouraging unemployment, and for this purpose it is essential that the rate of unemployment benefit payable shall be relatively low. It would be fatal to any scheme to offer compensation for unemployment at a rate approximating to that of ordinary wages.

5. For the same reason it is essential to enlist the interest of all those engaged in the insured trades, whether as employers or as workmen, in reducing unemployment, by associating them with the scheme both as regards contribution and management.

- *6. As it appears on examination that some trades are more suitable to be dealt with by insurance than others, either because the unemployment in these trades contains a large insurable element, or because it takes the form of total discharge rather than short time, or for other reasons, it follows that, for the scheme to have the best chance of success, it should be based

upon the trade group, and should at the outset be partial in operation.

7. The group of trades to which the scheme is to be applied must, however, be a large one, and must extend throughout the United Kingdom, as it is essential that industrial mobility as between occupations and districts should not be unduly checked.

8. A State subvention and guarantee will be necessary, in addition to contributions from the trades affected, in order to give the necessary stability and security, and also in order to justify the amount of State control that will be necessary.

9. The scheme must aim at encouraging the regular employer and workman, and discriminating against casual engagements. Otherwise it will be subject to the criticism of placing an undue burden on the regular for the benefit of the irregular members of the trade.

10. The scheme must not act as a discouragement to voluntary provision for unemployment, and for that purpose some well-devised plan of co-operation is essential between the State organisation and the voluntary associations which at present provide unemployment benefit for their members.

Our analysis, therefore, leads us step by step to the contemplation of a national contributory scheme of insurance, universal in its operation within the limits of a large group of trades—a group, so far as possible, self-contained and carefully selected as favourable for the experiment, the funds being derived from compulsory contributions from all those engaged in those trades, with a subsidy and guarantee from the State, and the rules relating to benefit being so devised as to discriminate effectively against unemployment which is mainly due to personal defects, while giving a substantial allowance to those whose unemployment results from industrial causes beyond the control of the individual.

Is such a scheme practicable?

This is a question partly actuarial, partly administrative, and partly political, and it is, of course, quite impossible to discuss it adequately on an occasion such as this.

I may, however, say that so far as can be judged from such data as exist (and those data are admittedly imperfect and rest on a somewhat narrow basis), a scheme framed on the lines I have indicated is actuarially possible, at least for such a group of trades as building, engineering, and shipbuilding—that is to say, a reasonable scale of contributions will yield benefits substantial in amount and of sufficient duration to cover the bulk of the unemployment ordinarily met with in these trades.

The administrative difficulties of such a scheme are, of course, great, but none of these difficulties is, I think, insuperable if there be a general desire that the experiment should be made. Certainly the experience of the few foreign schemes which have broken down creates no presumption against success, for the failures have been quite clearly attributable to causes which would not operate in the case of a national scheme such as is now under discussion, especially if it were worked, as it naturally would be, in close connection with the new Labour Exchanges.

Perhaps the most difficult administrative problem would be the adjustment of the scheme, so that while its benefits are not confined to workmen for whom provision is made by voluntary associations, it would yet operate so as to encourage the work of these associations, and not to undermine and destroy them, either by competition or detailed control. The problem, however, though difficult, is one for which a solution can assuredly be found if it be the general desire that a scheme shall be brought into operation.

The remaining question is one of high policy. What importance do we as a nation attach to the policy of promoting industrial security by collective action? And what sacrifices are those interested prepared to make for such an object, and, in particular, to minimise the irregularity of working-class incomes so far as affected by irregular demand for labour? The final answer will depend not only on the general view taken of the relations of the individual and the State, and of the scope and limits of political action, but also on the relative weight attached to this particular object as compared with other objects which also have claims on public funds and energy.

LLEWELLYN SMITH

THE STATISTICAL MEASUREMENT OF PROFIT.

PROFIT is the one share in the distribution of wealth that has not been subjected, until quite recent years, to statistical measurement. We have long had statistics, more or less trustworthy, of rent, of wages, and of interest: but until the last decade there has been an almost entire dearth of exact information about profit. And this is in the nature of things. Whether profit be, or be not, under a system of private property, a necessary expense of production, it is sharply distinguished from other expenses in that, in the actual course of business operations, it is a residual share, and, therefore, one that cannot be contracted for beforehand. Wages, rent, and interest, in the usual business senses of these terms, are bargained for before the labour, the land, or the capital, as the case may be, is set in motion: the amounts agreed upon are known exactly to the parties immediately concerned: and one or both of the parties is usually quite willing to make the precise figure public. But profit cannot be so bargained for: it is what remains after the other, contracted, payments have been made: and the recipient, even if he knows exactly what the amount is—which is by no means always the case—is very commonly loth to make the fact public. Accordingly, so long as business was carried on by the individual “undertaker” or “*entrepreneur*” of our economic literature—by the “sole trader” or “partnership” of the lawyers—it would have been impossible to obtain reliable statistics of profit, even by the utmost exertion of the inquisitorial powers of the State. But business, as we all know, is now rapidly assuming a different form of organisation, that of the joint-stock company; and with the new form has come a new publicity. The public announcement of rates of dividend, and the compulsory filing of balance sheets in a public office, have put a mass of material at the disposal of the statistician; and of this material he has just begun to avail himself.

How far the conclusions which may possibly be derived from this material can be extended to the rest of the field of business

enterprise we cannot now spend much time in considering. It is obvious that as company trading is almost entirely a matter of limited liability, the element of contract has now, to some extent, made its appearance even in relation to profit: the investor has succeeded in defining and limiting his risk of loss, at any rate, to the amount of his share. We may, therefore, argue *a priori* that "in the long run" business men would not continue to venture their all, by persisting in forms of organisation which involve unlimited liability, unless they expected an extra gain, over and above that obtained from investments in the company form: I would not say an extra gain actuarially equal to the greater risk, but sufficient to induce them to run the greater risk—which is a different thing. There is a widespread impression among business men that larger profits are, in fact, made in private unlimited concerns than in public limited ones. Whether this be so or not, it looks as if the limited company organisation were so rapidly extending itself over the whole field of business enterprise, with the one great exception of agriculture, that the profits of unlimited liability would, at no distant period, become a relatively negligible quantity. At any rate, it is to the results of investment in the company form that I shall here confine myself.

Various attempts have been made in various countries, ever since joint stock companies came into existence, to collect statistics of the returns from investments. Owing to the imperfection of the methods employed, these attempts have almost all failed to reach significant conclusions. It is only during the last ten years, and, so far as I know, only in Hungary and Germany, that attention has been concentrated on the problem of *method*. I now propose to give some account of the efforts referred to, and to summarise and criticise their results. This interesting last chapter in the history of statistics is apparently very little known in England. Yet it has the most direct bearing on a question with which the economist has long been concerned—the question whether, and in what sense, there is such a thing as a "usual" or "general" rate of profit, a "normal" return to capital; to what extent, that is, the "tendency" towards an equalisation of profit, the "approach to a levelled result"—which inevitably exists to some extent, simply because men are men—does, in fact, reach its goal and actually produce a level. It bears as closely on the other and cognate question, in what measure there does actually show itself, in the long run, a return over and above, or other, than, the "current rate" of interest; whether there is such a

thing, in the long run, as what some economists designate *net profit*. Whether the economist can hope for satisfactory answers to these questions or no, we can hardly doubt that, in the present state of the public mind, the statisticians will soon be called upon, in all countries, to do what they can to get at the facts. The way has been led by the German Government, which imposed upon the Imperial Statistical Office, in 1908, the task of preparing statistics of "The Business Results of German Joint Stock Companies." The first report is now to hand, giving the figures for the business year 1907-8; and it is with this report that my survey will conclude. If the German Statistical Office goes on with these reports—and it can hardly turn back—it is highly probable that the English Board of Trade will soon be called upon to follow its example, just as the German office has had to imitate our English labour statistics. My survey will be limited to the work of Körösy (1901), Wagon (1903), Dermietzel (1906), Werner (1907-9), and that of the German Imperial Statistical Office itself.¹

To the distinguished statistician, Dr. Josef von Körösy, Director of the Statistical Bureau of the city of Buda-Pesth, is due the credit of having first seriously faced the problem, and of having opened the new chapter in the history of statistics. His inquiry into the financial results of the working of the joint stock companies domiciled in Buda-Pesth during the quarter of a century between 1874 and 1898,² was distinguished from previous attempts in a like direction by the elaborate discussion of principles by which it was accompanied; and well-nigh the whole of the subsequent discussion has turned either upon the validity or upon the feasibility of the principles there laid down. He began—and here, rightly or wrongly, he has been followed by all who have since worked in the field—by drawing a sharp distinction between the gains of companies as such and the gains of individual capitalists from investment in companies. Among investors, he confined his attention to the holders of shares or stock, as distin-

¹ This list includes the most outstanding names. For other writings and statistics reference should be made to the very useful account of the whole movement written by the statistician who has subsequently been put in joint charge of the official enquiry: *Die Rentabilität der Aktiengesellschaften: ihre Feststellung in amtlichen und privaten Statistiken auf Grund den Bilanzen*. Von Dr. jur. Ewald Moll, Gerichtsassessor. Jena, 1908.

² *Die finanziellen Ergebnisse der Aktiengesellschaften während des letzten Vierteljahrhunderts (1874-1898)*. Übersetzung aus dem Ungarischen. Berlin, 1901. The inquiry did not extend to "those unimportant companies which had only a few thousand gulden capital." It was an official inquiry in the sense that the material was obtained in reply to a "statute" of the municipality, confirmed by the Hungarian Minister of the Interior.

guished from debenture- or bond-holders, or any other contributors of capital contracting for a fixed interest. For these two distinct things, the earnings of companies as such, and the return to individual shareholders, Körösy and succeeding statisticians have used a variety of terms, ambiguous in German and untranslatable into English—*Rente* in various combinations being the most common. The problem, as a whole, has come to be spoken of in Germany as the problem of *Rentabilität*; and that, again, is a term that can hardly be translated. Most of the English terms that occur to one—even “profit” itself—are clogged with disturbing associations, and imply more than we may want at the outset to be committed to. I shall venture, therefore, to use the least coloured of all available words, and to speak henceforth of *company gain* and *shareholder's gain*.

That company gain is different from shareholder's gain follows, according to Körösy, from the fact that the whole of the year's profit, as disclosed by the balance sheet and the profit and loss account, is not distributed among the shareholders in the shape of dividends, but only that portion that the company determines so to distribute, after providing, *e.g.*, for reserves and for directors' fees. It is from the balances, therefore, that company gain must be ascertained. But it was the ascertainment of shareholder's gain that was Körösy's main object. This is constituted, as a rule, mainly by the dividends paid, though it is a chief point of Körösy's argument that it by no means depends on dividends alone. Even more dividend statistics, before Körösy's time, had usually been vitiated by the fatal defect that they presented simply arithmetical, and not weighted (*quantifizirte*), averages. The common practice had been to divide the sum of the declared rates of dividend by the number of companies, irrespective of their size. Thus, if two companies paid, the one 5 per cent. and the other 10 per cent., the usual practice had been to speak of an average dividend of $7\frac{1}{2}$ per cent.; though, of course, if the 5 per cent. was paid on a share capital of 10 millions and the 10 per cent. on a capital of one million, the average dividend on the whole 11 millions was in reality only about 5·4 per cent. This contention of Körösy's has met with general acceptance. His second contention went further: it was that the shareholder's gain must be conceived of as the net surplus remaining to the shareholder after reckoning in every kind of receipt and loss associated with the investment. As a general proposition this is likely to be agreed to as soon as it is formulated; the difficulty arises when we begin to set down the positive

and negative items. According to Körösy, we should reckon on the negative side (1) all actual losses of capital, whether complete, as where a company comes entirely to grief, or partial, as where the shareholder has to submit to a reduction in the nominal value of his holding, or rescues out of a liquidation only a part of the original sum invested; (2) his proportionate share of the ultimate net losses, if any, appearing in the last year of the company's trading. This second item—which, however, in an account extending over a number of years, is likely to be a comparatively small one—has, as we shall see, been pretty generally called in question by later Writers. On the positive side Körösy would add to dividends any other acquisitions, possessing a pecuniary value, which came to the shareholder *from the company*. The most important of these is the gain conferred on existing shareholders by a new issue to them of stock, either for nothing (bonus stock) or on preferential terms, *i.e.*, at a price lower than it was fetching, or would have fetched, in the market. On the other hand, Körösy refuses to include as gains or losses of the shareholder, as such, any increase or fall in the market value of his shares, on the ground that this arises from speculation and not from investment. This may, indeed, be the only feasible plan to follow; but, as to the question of principle, perhaps as much may be said against Körösy's rule as in its favour.

Having thus determined the actual sum of the company gain and the shareholder's gain, the next question is how to arrive at the capital sum wherewith the gain in either case is to be compared so as to obtain a percentage figure. Körösy has no doubt that the figure here needed is the total sum actually *paid in* by investors, and not only the nominally *paid-up* capital; and when companies issue their shares at a premium this may obviously be a good deal more than the nominal paid-up capital.

An example of Körösy's procedure will make all this clearer. His final object—and I ought to have emphasised this before—is to ascertain the average annual gain over a long series of years obtained by the whole of the capital, first, in the several lines of investment taken separately—banking, industrial, insurance, transportation, &c.—and then in the field of investment as a whole. Take, for instance, the banking institutions of Budapesth. Körösy begins by adding up the amounts both of nominally and of really invested share capital in each of the years of the period, and then sums up the annual profit balances (deducting losses), and compares, by way of percentage, the figure of gain to the two-figures of capital. The sum of the nominal

capitals with a claim on dividend in each of the years of the period—"the nominal year-capital"—was about 1,311 million gulden. On this the net return amounted to some 109 millions; and 109 on 1,311 is about 8·3 per cent. But the real paid-in capital was much larger, since the shares had usually been issued at a premium. These premiums Körösy ascertains, and adds to the nominal capital of each year, and so reaches the real "paid-in year-capital"; and comparing the same net profit with this considerably larger capital sum, the real rate of company gain over the quarter-century is found to be the noticeably lower figure of 7·3 per cent.

Then he turns to his more particular quest, the shareholder's gain :—

The items of Receipt are

	Millions of gulden
1. Dividends	96·202
2. Gain on shares issued below market value	11·984
	<hr/>
	108·186
	<hr/>
	108·186

The items of Loss are

1. Losses of paid-up capital	27·783
2. Losses of premiums on shares ..	8·595
3. Reduction of capital	·100
4. Balances of loss on the last balance sheets	·206
	<hr/>
	36·685
	<hr/>
	71·501

This works out at 5·4 per cent. on the nominal capital, but 4·8 per cent. only on the real capital. 4·8 per cent. is, therefore, the figure for the real shareholder's gain in the banking business of Buda-Pesth over a period of a quarter of a century, though, as we have seen, the company gain was as much as 7·3 per cent.

A percentage of 4·8 was considerably less than capitalists were receiving during this period who spent their money in the purchase of government or municipal stock, for they received 5·10 per cent. and 5·56 per cent. respectively. It cannot fail to be surprising, therefore, that the application of the same procedure to savings banks (*Sparkassen*), with an actually paid-in year-capital of about a quarter the size of that of the banks, produces the very different conclusion that, in that direction of investment, 19·3 per cent. was the rate of shareholder's gain—what Körösy justly calls "one of the most splendid investments conceivable!"

Unfortunately, however, our author seems to have found him-

self unable to carry out his principles in all their integrity over the whole field of Buda-Pesth investment. This will be understood when we look at the final table, to which the whole work leads up. I have translated the terms as best I could and shortened the table by omitting the hundreds (which will explain the slight difference of some of the totals from the sum of the given items). I have also added the last line.

TABLE I. (KÖRÖSY).

Calculation of the Net Shareholder's Gain (Aktienrente) from Buda-Pesth Companies (1874-1898) in gulden (000 omitted).

	Banks.	Savings Banks.	Industrial Companies.	Insurance Companies.	Transportation Companies	Other Companies.	All Companies.
Year-Capital, entitled to dividend	1,311,387	246,500	1,504,845	228,648	244,950	69,680	3,606,010
RECEIPTS OF SHAREHOLDERS.							
1. Dividends	96,202	45,043	102,908	21,183	18,901	3,961	288,203
2. Payments from Reserve	—	—	2,050	2,385	1,105	—	5,540
3. Value of Preferential Allotment... .. .	11,984	10,150	2,688	—	5,122	—	35,950
4. Gains from <i>Gewinn-Scheinen</i>	—	—	—	—	101	—	101
5. Payments on Winding-up	—	—	220	—	—	—	220
	108,186	55,193	107,806	23,568	25,128	3,961	330,318
LOSSES OF SHAREHOLDERS.							
1. Loss of Paid-in Capital in extinct companies	27,783	—	13,876	1,907	980	1,197	45,743
2. Loss by Reduction of Capital	100	700	13,637	5,516	—	797	20,752
3. Loss on Current Business	206	—	6,132	2,301	—	478	9,119
4. Loss on Preferential allotment... .. .	—	—	—	15	—	—	15
	28,090	700	33,645	9,740	980	2,472	75,582
NET GAINS OF SHAREHOLDERS.							
	80,096	60,243	74,211	13,628	24,556	1,487	251,436
Nominal Shareholder's Gain (per cent.)	6.1	24.4	4.9	6	10	2.1	7.1
Nominal Shareholder's Gain (excluding Savings Banks)	—	—	—	—	—	—	5.8
Real Shareholder's Gain (per cent.)	4.8	19.3	—	—	—	—	—

Thus Körösy's final figure for the average annual return on the share capital is 5.8 per cent. 7.1 per cent. is the result of the calculation as a whole; but Körösy assumes, for reasons which I find nowhere explained, that the exceptionally large gains of savings bank investments may be properly omitted, with the result of bringing the figure down to 5.8 per cent. And in his concluding chapter he proceeds to compare investment in share form, with an average gain of 5.8 per cent., with investment in

other forms, *e.g.*, in debenture (*Pfandbrief*), with its average gain of 5.12 per cent.

But now, it has to be noticed that, after all, 5.8 per cent. is only what Körösy calls "the *nominal* shareholder's gain," since, in spite of his own statement of principle, it is reckoned on the nominally paid-up, and not on the actually paid-in, capital. Either the figures for the sums paid over and above the par value of the shares, in all classes of business other than the two branches of banking, were not obtainable, or the calculation proved too laborious. Anyhow, Körösy did not ascertain their amount; and therefore, to get comparable figures, he has to fall back, in his final summation, on the nominal paid-up capital even in banking. He emphasises the fact that "the gain that shares really obtained was considerably less than the figure now shown (5.8 per cent.), because the calculation is based on the relation of the net gain to the nominal capital, though in reality only a part of the investment was effected at par." If anything like the same allowance has to be made for the whole field of investment as in the case of the banking institutions, *i.e.*, about one-fifth, the final figure would be reduced to somewhere about 4.7 per cent. That a fifth might be a reasonable addition we may, perhaps, also conclude from the circumstance that it is just that amount that has to be added to the nominal capital of German engineering concerns, as we shall see later from Werner's figures.

I have already, in passing, cast doubt upon more than one item in the account. The most dubious is the "Loss on Current Business," *i.e.*, the concluding balances of loss on certain of the profit and loss accounts. Most of the later statisticians whom I shall have to refer to are of opinion that, in including this item, Körösy has sinned against his own canon of the sharp distinction between company gain and shareholder's gain. An unfavourable balance sheet indicates a loss to the company, not to the shareholder as such—unless and until it leads to a loss of dividend or capital. If we strike out the nine million gulden under this head, we shall pull up our final figure from 4.7 per cent. to 5.1 per cent.¹

And this final result, 5.1 per cent., turns out to be identical in amount with the average interest of debentures, *viz.*, 5.12 per cent. So that the conclusion that I, and not Körösy, draw from Körösy's figures is that shareholders and debenture holders in the long run obtained the same gain. That gain was also just

¹ There are other dubious items, but the sums under each are too small to affect the final result.

what was paid on State bonds in those years when the credit of the State was at its best. State bonds, indeed, involved no small element of risk, and their interest was, perhaps, not all "pure" or "net" interest. If, accordingly, we identify pure interest with the interest paid by the savings banks, *i.e.*, 4.14 per cent., and define net profit, as some economists do, as the amount by which the gain of the investor as such exceeds net interest, we arrive at the interesting conclusion that the most that can be assigned to net profit over the whole field of Hungarian investment for a quarter of a century was just about 1 per cent.

Return, however, to Körösy's own 5.8 per cent., which is near enough for our purpose to the figure which I should myself draw from his data. Is it anything more than an arithmetical average? Has it any representative or typical character? Well, certainly it does not represent anything properly called a "level" of gain as between the several branches of investment. It is compounded from amounts of gain which, as we see from the table, represent the following percentages on the capital—transportation companies 10 per cent., banks 6.1 per cent., insurance companies 6 per cent., industrial companies 4.9 per cent., other companies 2.1 per cent. It does not follow that there was no "tendency" to a common "level." But clearly a quarter of a century was not long enough in Hungary to exhibit a realised level.

However, an average is by no means without significance, even if it does not represent a type. And, therefore, let us look more closely at Körösy's 5.8 per cent. (or our suggested 5.1 per cent.). What exactly does it mean? It means that that is the percentage of gain that would have accrued to the whole body of shareholders if, subscribing to the shares at par (or, in the case of my smaller figure, at the actual price received by the companies), they had kept possession of their shares ever since, or had parted with them at the price which they had themselves originally paid. It is the gain that would have accrued to a single person, "if we have recourse," as Körösy puts it, "to the fiction that all the capital invested in shares was the property of a single shareholder." It is "the general gain" of "the general shareholder." Now, from the point of view of the individual shareholder, this is an obtrusively violent fiction. How large a proportion of the Buda-Pesth shares were retained throughout the period in the hands of the original subscribers we have no means of ascertaining; but undoubtedly an increasingly large number of shareholders, as the time went on, had bought their shares from previous owners, at a price above or below par (or the original

price, whatever that may have been). The annual gain to each individual was, it need hardly be said, what we commonly call "the yield" to him at the price he paid. This is so evident that even Kőrösy himself, as he gets further into the investigation, seems to tire of his "fiction," and to lay more and more stress on yield. I shall return to this by and by. It will be sufficient to notice here that though the yield to the investor is of most consequence to him individually, no general percentage of yield can possibly be statistically determined, until we know the price at which every share was ever sold during the period. If it is a violent fiction to suppose that all the shares had been retained by the original subscribers, it is a no less violent fiction to suppose—as some statisticians have done—that they were all purchased year by year at the market price of the year (whether that price be taken from the beginning, the middle, or the end, or from an average of the first of each month or the end of each week). Moreover, figures of yield are apt to be absurdly deceptive. The price paid to a previous holder of stock, whether above or below the original price, does not enter into the working of the business: the company can only make use of the original price. And the yield, in consequence, may be at almost any distance removed from what we may conceive of as the earnings, in the operations of the concern, of the capital originally subscribed.

We see, then, that shareholder's gain, though it differs from what the term might at first suggest to some readers, does inform us of a fact of enormous economic significance, *i.e.*, of the average capacity of capital to secure a return, over and above its own replacement, when invested under conditions of limited liability and dissociated from any active share in the ordinary management. In these Buda-Pesth companies, management, so far as it was paid for by regular salaries, was deducted as working expenses before declaring profit or dividend. The cost of the higher management, commonly paid for in Hungary, as in Germany, by commissions (*Tantièmes*) to the directors, was likewise deducted, but after the profit had been announced, and it was taken out of the profit before the remainder was distributed as dividends. From balance-sheet profit were also deducted the appropriations to reserve; and evidently, if reserves are necessary to the successful working of a company, they cannot be included in shareholder's gain. According to a most instructive estimate of Kőrösy's, balance-sheet gross profits were divided in the following proportions:—

Shareholders (according to the figures of the last 25 years)	74.52 per cent.
Reserves (" " " 8 years)	9.43 per cent.
Directors' Fees (" " " 20 years)	8.32 per cent.

What became of the rest, he does not tell us. It is this 74 per cent., or, roughly, three-quarters of the nominal gross company gain, that we can alone regard as absolute business profit; and this, we have seen, was, in Hungary, over a period of a quarter of a century, somewhere between 5 and 6 per cent. on the capital actually put into industrial and commercial operation by the investor. What we are to call this fact, how it may be further abstractly analysed, just what functions such investors fulfil, and in what sense they are "undertakers," are all questions which remain to be considered; but it seems to me no small advantage to obtain a working estimate of the magnitude of the quantity we have to explain. For obviously the explanation must depend on the magnitude. If our figure, instead of being 5.8 per cent. (or 5.1 per cent. on my reckoning), had worked out either at something very much less or at something very much greater, we should certainly view it with different eyes.

On the subsequent investigations we need spend less time. That of Wagon (1903) was an application of Körösy's procedure to the statistics of such German companies as are quoted on the Berlin Exchange.¹ As this is one of the publications of the Political Science Seminar of the University of Halle, and the author expresses his obligations to Professor Conrad for suggesting the inquiry and advising him during its progress, we may regard the methods employed as sanctioned by Professor Conrad's high authority. Like Körösy, Wagon distinguishes between company gain and shareholder's gain; and, like Körösy, it is in the latter that he is most interested. Like Körösy, again, he seeks to discover the average over a long period of years—twenty, or even, where his material allows it, thirty years (1870 or '80 to 1900). But, unlike Körösy, he does not calculate a general figure for the whole field of investment, but stops short with a percentage for each of the several industries. The following table is an adaptation of Wagon's final table, with the nominal amount of share capital in 1900 added to give some sort of impression of the relative importance of the several trades.

In his calculations of shareholder's gain, Wagon has apparently deducted from the sum paid in dividends, not only all ascertainable losses of capital, but also—following the precedent

¹ *Die finanzielle Entwicklung deutscher Aktiengesellschaften von 1870-1900.* Von Dr. Edouard Wagon. Jena, 1903.

of Körösy—loss on current business recorded on the balance sheet of the last year. The amount, it is true, is so small as hardly perceptibly to affect the percentage figure. He does not, however, follow Körösy's more legitimate example and estimate the money value of the preference given to shareholders in new issues. On these two accounts his reckoning of gain to the shareholder is possibly a little lower than it should be. On the other hand, the capital sum with which he compares it is apparently "the nominal year-capital" of Körösy's nomenclature; although we have evidence that in some trades, at any rate, a good deal more was actually paid in by the shareholders. We can only conjecture that the omissions in the reckoning of the capital may have more or less balanced the omissions or mistaken deductions in the reckoning of the gain.

TABLE II. (WAGON).
German Companies (1870-1900).

Nominal Share Capital in 1900; in millions of marks	Industry.	Shareholders' Gain		Company Gain.
		1870-1900	1880-1900	1880-1900
		Per cent.	Per cent.	Per cent.
23.11	Rubber	10.87	11.56	14.65
155.44	Chemical	9.33	10.49	14.05
34.21	Paper	7.03	9.53	15.78
11.55	Distilleries	3.73	8.89	14.25
31.05	Gas	8.75	8.75	11.54
198.97	Metal	7.75	8.59	11.98
156.40	Breweries	6.44	7.61	10.01
91.12	Stone	5.39	7.47	11.26
346.28	Coal	—	7.42	9.10
22.48	Sugar	5.86	7.17	9.65
213.25	Machinery	1.18	7.09	10.17
2761.80	Banks	—	6.70	9.50
11.25	Food	—	6.16	8.53
75.80	Weaving and Spinning (cotton)	5.13	6.08	7.83
521.70	Iron	—	5.34	7.26
21.57	Milling	5.42	5.12	6.77
10.75	Wood	2.34	4.01	6.54
4.80	Baths	3.11	3.74	4.82
110.42	Building	(-0.58)	1.56	3.79
42.50	Cloth (woollen)	(-2.30)	1.45	5.55

So far, we have been dealing with conceptions already familiar to us. But Wagon now introduces some new considerations by urging that the total capital involved (*das mitarbeitende Kapital*) is more than the share capital. It is, he says, the share capital *plus* accumulated reserves (*echte Reserven*, not mere renewal or repayment funds) *plus* loans of the nature of debentures or mortgage. Wagon asserts that the figure of gain ought to be

recalculated on these larger bases, and proceeds to do so, with results which I will give for two industries, coal-mining and engineering.

1880-1900.					
<i>Coal Mining</i>				Shareholder's	Company
				Gain.	Gain.
				Per cent.	Per cent.
On Share Capital...	...	...	...	7.42	9.10
"	"	+ Reserves	...	6.53	7.98
"	"	+ Reserves + Debentures	...	6.23	7.47
<i>Machine Industry</i>					
On Share Capital.	...	...	...	7.09	10.17
"	"	+ Reserves	...	6.23	8.94
"	"	+ Reserves + Debentures	...	6.02	8.40

It is not clear whether, in reckoning on a capital figure which includes debentures, Wagon has remembered to add debenture interest to the gain.

Calculations of this kind are interesting. They remind us that the operations of a business depend on the total capital which it is able, or thinks it wise, to command. But even Wagon's estimate of the co-operating capital is not complete, or it would not be if it related to English companies; for it does not include bank overdrafts and advances. From the point of view simply of the amount of capital actually made use of by a company, there is, I suppose, no *economic* distinction between the capital borrowed from an individual on the terms of a debenture and capital borrowed from a bank subject to call.

But the whole calculation seems to me inappropriate and misleading so far as shareholder's gain is concerned, and open to a good deal of criticism so far as company gain is concerned. What the shareholder is to be credited with is the amount of his own investment. Debentures, and even reserves, are forms of control of capital which his investment has been able to command, but they are not part of the investment. As to the company, there is something to be said for reckoning in reserves—since reserves, like share capital, are the property of the company as such. Yet, as the reserves are themselves the result of the employment of the actually subscribed capital, it seems to me more convenient to keep the two conceptions apart, both in thought and in statistics. And certainly debentures should be excluded: they represent an outside obligation, and their employment is subject to conditions vitally different from that of the share capital. I suspect that calculations such as Wagon has attempted are inspired, perhaps unconsciously, by a desire to reduce the figure of gain to a point less apparently open to criticism from

the enemies of capital. But to diminish the percentage of gain by adding in any way to the capital that the individual shareholder has actually invested is not, I should have supposed, likely to be permanently convincing.

As Wagon's work is the product of Halle, so that of Dermietzel (1906) is the product of Göttingen: it announces itself as a doctoral dissertation, inspired and assisted by the distinguished economist and statistician, Professor Lexis.¹ It covers a period of twenty-six years (1876-1902), and deals only with the *larger* German companies, *i.e.*, those with a capital of not less than ten million marks, but excluding the railways. "It is clear," therefore, as the author observes, "that the conclusions here reached cannot be regarded as applying to the whole field of investment, since the companies examined form, in a sense, a favoured group: their large capital obviously gives them a position of advantage in business competition."

Dermietzel's work represents a new departure both in the object aimed at and in the method of presenting the statistical results. As to the object: when, after much acute criticism of Körösy, Dermietzel enters upon his own inquiry, we are left to ourselves to discover that the Göttingen dissertation has really abandoned the task as the Buda-Pesth statistician conceived it. It does not aim at ascertaining the total net gain of either company or shareholder: but contents itself with registering (1) the nominal or declared dividend, and (2) the yield which that dividend represents at the market price of stock at the beginning of the year. It is the yield, he declares, that is meant by *Rentabilität* in ordinary German speech; and, accordingly, that is what he calls it throughout. Obviously, the task Dermietzel sets before himself is incomparably easier than Körösy's.

And as to the form of summing up the results: Dermietzel abandons altogether the method of a "general" average (even weighted) either for investment as a whole or for particular industries, on the ground that it has no typical character. The reckoning of a general average, he argues, is only worth while "when we can expect that it will correspond, in a majority of cases, to the actual results in the several companies. But is that to be expected? We must answer in the negative, both for companies in the same year and over longer periods. A certain tendency towards equalisation there may certainly be. But there are so many obstacles in the way of an actual equalisation

¹ *Statistische Untersuchungen über die Kapitalrente der grösseren deutschen Aktiengesellschaften (mit Ausschluss der Eisenbahnen) von 1876-1902.* Von Otto Dermietzel. Göttingen, 1906.

that, even if we can suspect some such tendency, an actual levelling is not to be seen." And, after giving some examples of wide differences, he concludes "in statistics of *Rentabilität*, the average has no great material importance, but is a purely arithmetical abstraction." No doubt it is Professor Lexis whom we are here listening to. In place of averaging, Dermietzel employs the method of grouping, which brings out the relative prevalence of various rates.

He sums up his yield figures in a table from which it appears that the "predominant" or "usual" rates of yield were from 4 to 6 per cent., since that was the range of yields for some 70 per cent. of the market value of the shares. But this does not help us far towards what we have been seeking. Dermietzel, however, so far departs from his advocacy of mere yield figures as to give us a table of dividends, from which it appears that the predominant rates of dividend were from 5 to 9 per cent., though in many years the predominance was only that of rather more than half the share capital. As to the inadequacy of dividend calculations which omit all other sources of gain as well as all sources of loss, and are calculated on the nominal capital, I can but refer once more to Körösy's argument.

We come now to the most recent of the private investigations, that of the engineer, Ernst Werner.¹ This is the most intensive of all the inquiries, for it is limited to the one industry of engineering. It is also the most complete; and its astounding thoroughness in some directions will be realised when we notice that for certain recent years our author has ground out no less than ten different percentage figures, one for each of ten senses in which he thinks the term *Rentabilität* can be used; and this for the industry as a whole, for each of its seven branches, and for each of the three gradations of size in each branch. Yet not one of Werner's ten senses is the sense in which Körösy understood the object of his search!

Before looking at the *Rentabilität* figures, let us notice Werner's remarkable calculation, already incidentally referred to, as to the relation between nominally paid-up and actually paid-in capital. He finds that, in the engineering industry, the capital with which the shareholders had actually parted

¹ *Die finanziellen Ergebnisse der deutschen Maschinenbau-Aktiengesellschaften.* Von Ingenieur Ernst Werner, in *Thünen-Archiv*. II. 4 (1908). This deals chiefly with the figures of 1907. A summary statement of conclusions based on the figures of 1906 is given in *Technik und Wirtschaft*, May, 1908; and a like brief statement for 1908 (with modifications of method suggested by the Government report which had by that time appeared) in *Drucksache* 1909, No. 12 of the *Verein deutscher Maschinenbauanstalten* (the latter kindly supplied to the writer by the author).

(*tatsächlich von den Actionären in das Unternehmen eingebrachtes, or hineingestecktes, Kapital*) exceeded, in each of the years 1906, 1907, 1908, the amount of the nominal share capital by just 26 per cent. The result of a further investigation is to show that this excess tends to diminish. While in companies formed before and during 1870 it was as much as 55 per cent., on those formed between 1901 and 1907 it was only about 1·6 per cent. A comparison of the quinquennial figures from 1881 onward indicates—what we might have expected—that subscription above par was much more common in boom periods.

Now as to the *Rentabilität* figures. The one which most nearly approaches Körösy's goal is the percentage representing the proportion of the sum paid as dividends to the capital actually invested by the shareholders. For the three years 1906-8 this figure for the engineering trade as a whole, according to Werner's reckoning, was 6·3, 6·9, and 6·7 per cent. respectively. The inadequacy of this calculation, from the Körösy point of view, in that dividends alone are taken into consideration, is by this time sufficiently obvious. But I will not attempt to correct these figures of Werner for particular years, because he gives us also a long-period figure more suitable for placing by the side of Körösy's percentages. For the whole engineering industry, so far as and so long as it has been organised in the company form, *i.e.*, for a period of some forty years, he works out for the proportion between dividend payments and total actually invested capital a percentage figure of 6·46. The table, which is one of remarkable interest, is given below. The capital sums are what Körösy calls "year-capitals," *i.e.*, the summation of all the capitals of each year.

TABLE III. (WERNER).

Business Results of German Engineering Enterprise, since, and so far as, it has been organised in the Company form.

Branch	Sum of all the Nominal paid-up share Capitals.	Sum of all the Capitals actually invested by Shareholders.	Sum of all the Dividends.	Percentage of Dividends to Nominal Capital.	Percentage of Dividends to Capital really invested.
	Marks in millions.	Marks in millions.	Marks in millions.		
1. General Engineering ...	2,920·2	3,599·0	196·2	6·70	5·46
2. General Engineering in association with the building of locomotives ...	1,388·1	1,746·1	123·1	8·84	7·03
3. Ditto, Shipbuilding ...	886·5	956·6	64·2	7·27	6·74
4. Machine Tools ...	658·8	808·0	42·5	6·49	5·29
5. Textile Machinery ...	231·3	238·2	23·7	10·30	9·97
6. Agricultural Machinery ...	318·9	349·8	24·4	9·90	7·00
7. Engineering Manufactures	1,266·8	1,501·7	119·4	9·40	7·93
Totals... ..	7,671·0	9,200·6	593·7	7·75	6·46

We may have the more confidence in this figure 6·46, so far as it goes, because, although we have nothing to compare that with, we have something with which we can compare the accompanying figure, 7·75 per cent., which Werner gives as the proportion of dividends to nominally paid-up capital. For this 7·75 per cent. for German engineering, from the beginning (a year or so before 1870) down to 1907, is pretty near Körösy's similarly calculated 7·3 per cent. for Hungarian metal and machinery companies for the period 1874-98. And Wagon's somewhat smaller figure, 7·09 per cent., for German engineering, 1880-1900, was obtained by reckoning in capital losses.

Returning, then, to 6·46 with renewed confidence, let us consider just what it means. It means the percentage relation of the gain by way of dividends, and of dividends only, to the capital actually paid in by shareholders. But does that complete the account on the side either of receipt or of loss? Were there no bonus shares, or shares issued to existing shareholders on preferential terms? Körösy added to the 103 million gulden of dividend receipts of Hungarian shareholders in "industrial" companies some five million gulden as the value of these other privileges. If proportionate advantages accrued to the shareholders of German engineering concerns, we should have to add to the 593 million marks of dividends some 29 millions of extra gains. Much larger is the omitted item of loss. According to Wagon, the capital losses of the German engineering industry amounted to more than 60 millions between 1870 and 1880, and to more than 23 millions between 1880 and 1900. As there must have been some losses before 1870 and after 1900, a deduction of 100 millions for capital losses would seem a safe estimate. The resulting figure of 522 for net shareholder's gain (*i.e.*, $593 + 29 - 100$), will reduce the percentage from 6·46 to 5·68. And some such figure as this—say 5·6 per cent.—is probably the best figure we can get for our purpose. In a sense, no doubt, it is unreal; it is what the "general shareholder" would have received over the course of four decades from engineering investments if he had never parted with them. But that is the same thing as saying that it was the surplus share of the product which went to those who contributed capital, who undertook the limited risk involved in the investment, and exercised the amount of control which falls to the ordinary shareholder—the share, that is to say, remaining after all the working expenses had been met, including the remuneration both of directors and managers and the interest on borrowed money. This surplus went to somebody; and if it

did not go to shareholders who entered later and bought these shares at an enhanced price from previous holders, it went to those who had sold out at the capitalised value of the expected dividends.

And now let us observe that, while at the beginning of the period, about 1870, the rate of interest in Germany in safe investments was somewhere about $4\frac{1}{2}$ per cent., it sank to $3\frac{1}{2}$ per cent. by 1885, and to 3 per cent. by about 1895; since then it has gone up again to about $3\frac{1}{2}$ per cent.¹ Taking $3\frac{1}{2}$ per cent. as about the average for the whole period, we see that, according to the terminology of those who regard as "net" profit only that gain from investment which is over and above "the current rate of interest," the "net" profit in the German engineering industry has been about 2 per cent.

We must again remind ourselves, indeed, that such averages are very largely of a merely arithmetical character. Werner's result, 6.46 per cent., is brought about by combining figures as divergent as a trifle under 10 per cent. in the textile machinery branch, 7 per cent. in the locomotive and agricultural machinery branches, and some $5\frac{1}{2}$ per cent. in the machine tool branch. The undoubted levelling tendency has, we perceive, even within one great industry, been far from effective in bringing about an actual level as between the several branches. Yet we might have supposed that capital would have been pretty fluid as between the several branches of an industry like engineering, and that forty years were long enough for apparent divergencies to be smoothed away.

Werner's figures repeat the lesson of Körösy's table for Hungary, with the additional emphasis derived from comparison between branches of the same trade. They show, I think, pretty conclusively, that the proposition can no longer be accepted (if, indeed, it is still maintained) that there is such a thing in actual fact as a general level of profit. And I venture to think, also, that this is a conclusion of some practical importance; for even some economists who were careful to speak of the tendency simply as a tendency were apt in their discussion of such a topic as the incidence of taxation to assume that the tendency reaches its goal.

And now, at last, we come to the Report of the German Imperial Statistical Office for the business year 1907-8.² It follows the principles formulated in a Memorandum drawn up by the Office

¹ Cf. Schmoller, *Grundriss* § 191.

² *Die Geschäftsergebnisse der deutschen Aktiengesellschaften im Jahre, 1907-8: Vierteljahrshefte zur Statistik des Deutschen Reichs; Ergänzungsheft zu 1909. II.*

itself, and accepted by the Annual Conference of Official Statisticians at their meeting at Nuremberg in May, 1908; and it arrives at four figures of *Rentabilität*, two for the companies as such and two for the shareholder. The two figures for company gain are derived from the comparison of the total amount of profit for the year (deducting loss)—after taking out all that the Office regarded as working expenses, but not directors' *Tantièmes*—with (1) the share capital entitled to dividend, and (2) the business capital (*Unternehmens-Kapital*). "Business capital" is Wagon's intermediate stage on the way to his "total capital invested," and it is what some writers call *werbendes Kapital*. The Statistical Office will not go quite as far as Wagon, but it attaches much importance to the conception of business capital (*i.e.*, share capital entitled to dividend *plus* reserves proper). The two figures derived from comparisons of gain with two such diverse conceptions of capital differ, as we might suppose, very considerably—they are 10.1 per cent. for the former and 8.4 per cent. for the latter. Neither of these figures include concerns which were wound up or entered into liquidation during the year.

Now come to shareholder's gain. Here the two figures are derived from a comparison of the sum paid as dividends with (1) the total share capital entitled to dividend, and (2) the share capital of those companies only which declared a dividend. The second figure is obviously valueless. It is the first of the two, *viz.*, 8.1 per cent., on which we must concentrate attention. As an indication of the real gain of the shareholder, this figure, as the Report itself justly remarks, must be received "with a certain reserve." For, first, it pays no regard to companies wound up or in course of liquidation during the year. For this omission the Report is cautiously apologetic. It recognises that the calculation cannot be regarded as complete so long as it is limited to going (*tätige*) concerns; other concerns are "not yet" included on two grounds. One is that capital losses belong to more than one year; the other is that the Nuremberg Conference decided to leave them out. But how serious is the omission may be judged from the fact that the companies wound up or in liquidation in 1907-8 had a nominal share capital of 400 million marks. If we conjecture that half of this capital would ultimately be lost, and accordingly deduct 200 from the 1,022 millions of dividend received on the 12,663 millions of paid-up capital, the 8.1 per cent. is reduced at a swoop to 6.5 per cent. And paid-up, as we have said *ad nauseam*, is not the same as paid-in. Werner, it will be recalled, reckoned the really paid-in capital in the engineer-

ing trade as about one-fourth more than the nominally paid-up. If anything like this proportion held good of German companies in general, the real percentage of shareholder's gain for 1907-8 would be further reduced to some 5.2 per cent.

After all these years, then, of preliminary non-official studies, the official report provides the investigator of business conditions with only a part, though a very welcome part, of the data which he needs for the ascertainment of shareholder's gain. It is, perhaps, as much as can safely be done as a beginning by a government office. But two of the other data which are clearly necessary for an economic judgment, viz., the prices of the original subscription and the capital losses on reduction of capital or liquidation, are already published by stock exchange handbooks, and are evidently obtainable. If it is thought that an official estimate of shareholder's average real gain—everything considered—is too risky for a government office; that it will be too "subjective," or that it will give a handle to Socialist or anti-Socialist controversy; then one would suggest that the office should just print the data in question as an appendix to its present form of report, and leave private statisticians to draw their own conclusions. It will be rendering greater service by doing this than by following the advice of the Nuremberg Conference and preparing tables of yield at market prices. For any stockbroker's list will give us that information; and what the economist wants to know is what the suppliers of capital to business concerns get in the long run over and above the capital they actually put into them.

In this article we have been concerned only with Hungarian and German companies, and have confined ourselves to the considerations which Hungarian and German statisticians have themselves brought under our notice. When we turn to the problem as it makes its appearance in England or America, we cannot but feel that the conditions we have been studying represent a relatively early stage in company organisation, and that, difficult as the problem was that confronted Körösy in 1900, it is a far more difficult one that confronts the English or American statistician in 1910. Modern "trust finance"—the finance of the great new industrial combinations—creates difficulties in the way of gain statistics that will tax the highest skill of the economist and accountant—if, indeed, they are not insuperable. The fundamental question, as it is viewed in the preceding pages, is the return to capital actually put into the working of business concerns. But where, as is increasingly the case, a company is

a consolidation of a number of previously existing concerns, its capitalisation commonly represents, besides the valuation of plant and the like (which investors in the past have, presumably, in some form or other paid for), a very large allowance either for "goodwill," or for the anticipated value of "the economies of combination," or for both. If the purchase price is paid to the vendors partly in stock which they retain, that portion of it which answers to goodwill or "expectation" does not represent any actual investment by anybody. If, on the other hand, this extra stock is either, in the first instance, taken by the public and the vendors paid out of the money so subscribed, or given to the vendors and by them sold to the public, there is a real investment on the part of the public, but the sum invested goes into the pockets of the vendors, and is not available for the business itself.

But I must content myself for the present with indicating the general character of the situation. The purpose of this article is merely to open the discussion; and a review of the continental statistical work is, perhaps, even for us, the best path of approach.

W. J. ASHLEY

ON FINANCIERS' PROFITS.

THE theory of distribution, in the form that may be regarded as orthodox at the present day—let us say, as presented in Marshall's *Economics*—divides the whole produce of industry into shares that are earned and due to particular elements of productive power. These shares are, of course, due only in an economic, not in an ethical sense. The attempt to give every one his "due"—ethically—is apt to lead to the impossible problems satirised by Mr. Smart where he discusses the share of the product that a wise government might award to Miss Corelli in return for her novels. Leaving such attempts aside, we have, no doubt, to accept as our guide in distribution, what each producer is able in the actual situation of affairs to secure, and then, if we wish, to compare this state of things with some ethical ideal. It is a matter of satisfaction, therefore, that the pure theory of economics is able to offer reasons why such and such a share goes to labour, to capital, and so on; and the existence of such a rational basis for distribution at the present day undoubtedly gives the mind a certain degree of contentment with that distribution which the mere unexplained differences in wealth between individuals would not give. But I think most readers will have found this—limited—impression of contentment reduced to a minimum, and the intellectual satisfaction of the theory to be somewhat lacking on one point: the treatment of the capitalist-*entrepreneur*. The object of the present article is to examine certain assumptions of the distribution theory, with a view to rendering this point clearer.

The theory of the return to land was the first to be made clear. We have learnt to look upon land as consisting of a very great number of possible sites for occupation—take the case of a city, for definiteness—to be obtained in pieces as large or small as may be needed by the occupier, and varying, extremely, but continuously, in their advantages. In one city of moderate size there may be a hundred thousand such pieces, varying in size from the smallest that a habitable house can be put on upwards, and in value from the site of a suburban cottage to that of the choicest

business sites in the middle of the city. These hundred thousand pieces of land are probably owned by several thousand persons; and even if many are in the hands of a few rich men or land companies, there is effective competition in nearly all (if not all) cities; and still more so when the competition between different cities is taken into account. We have, therefore, a land "market" in which there are many thousands of buyers and sellers; with the result of a clearly graded valuation. From, perhaps, £25 an acre in the outskirts, to £250,000 an acre in the centre, a skilled valuer will always be able to give a close estimate of what a piece of land is worth—what is "due" to the owner of this factor of production. It will be at once evident that the cause of this precision of value lies in the great number of individual bargains: it is a statistical result.

The theory of wages is similar in this respect. We picture employers and employed as constituting a market, in which they bargain, with the result of fixing—for the given time and country—rates of wages suitable for the various grades of labour. The bargaining is sometimes done collectively, as where a trades union makes terms for all its members at once; but it is, none the less, competitive, and the result can be treated by statistical methods, for in any trade there are numerous employers; and if a trades union becomes so strong as to exert monopolistic pressure, its power is limited by several circumstances—by the existence of a mass of outside labour more or less capable of adaptation; by the influx of youth into a trade that has become exceptionally advantageous to the workmen; by the restriction of output that must result from too great pressure on employers, and the consequent attempt to raise prices. While, therefore, an organised trade has advantages over unorganised, the advantages cannot rise above a moderate percentage in wages, and has usually been regarded with satisfaction, as tending to a more equal distribution of wealth, and, therefore, greater total enjoyment from it. It is to be noted that the underlying assumption here is mobility: a condition which modern economic changes and legislation are both tending to promote.

The influence of mobility of labour may easily be underrated at first sight. The fact that no opportunities of advertisement and cheap travel will enable an unemployed workman of one highly specialised trade—say a watchmaker—to fill a vacancy in another—say a seaman—may make it seem that the small amount of mobility actually existing must be ineffective in levelling wages. But it is only a small amount of mobility that is needed.

The interest on capital is treated in the same way; and here the statistical regularity of results is apt to seem greater, because it is an approximation, not to a fixed grading, as in the case of land of varied value, or labour of varied skill, but to a real uniformity, inasmuch as one hundred pounds of floating capital is exactly like another hundred pounds.

This uniformity shows itself in the fixed rate of interest (apart from insurance against risk) obtainable by means of banks, savings banks, and investment markets.

As soon as we leave the "pure capitalist" (*i.e.*, the clergyman, the widow, the savings bank depositor, &c.) for the capitalist employer, the statistical regularity becomes less.

The ambiguity of treatment of the *entrepreneur*, to be found in books on economics, reflects this greater complication. Sometimes he is partly confused with the capitalist; sometimes he is sharply distinguished from the capitalist, and we are told that he receives a special return, called wages of management, to be distinguished from the return to capital—which he may have borrowed from a bank. Let us review the actual state of industry.

There is the small shopkeeper, trading with a few hundred pounds of capital of his own; he makes—if he is lucky—his 3½ per cent. on capital, together with the market rate for his skill, *i.e.*, what a big trading company would pay him as an employee; and, perhaps, something else. But most writers on economics will tell you that taking ten thousand shopkeepers over a decade, this something else is apt to vanish owing to competition. *A priori* reasoning would lead one to expect it to vanish, and probably it does. On the other hand, we have the manager of a big business, who is paid, whether in salary or commission, an income that is almost as strictly wages of his skill as a carpenter's. But such a manager is not head of a business: he may conduct all the technical operations, and even the ordinary buying and selling, but the general lines of policy are laid down for him by his board of directors. It is not he who decides on the larger risks, such as the erection of a new factory; so that he is really little more than a superior workman—for the most ordinary workman has to exercise some responsibility in the use of material and so on. The reward of this class of managerial ability is pretty clearly defined by the usual "higgling of the market," like that of a lawyer or an engineer; and it is hardly ever regarded as excessive even if it exceeds ten thousand pounds a year—and this is rare.

But modern writers on economics have been inclined to de-

scribe a class of *entrepreneur*, who is head of a business, and yet buys capital as he buys labour and materials. Now this type, though an important one to describe, is hardly to be found pure. The men who establish moderate businesses do, it is true, very commonly borrow money from more or less dormant capitalistic partners; but they nearly always, if not always, have some money of their own. The business man who, having nothing, can persuade a capitalist to lend him several thousand pounds at $3\frac{1}{2}$ per cent., plus a reasonable allowance for risk, must be very rare, if not entirely a figment of the economist's imagination. What really happens in contracts between an *entrepreneur* and a capitalist is either that the business man puts a substantial sum of money up himself—say a quarter to a half of the total capital—and gets one or more capitalists to put up the remainder, and allow him a very free hand in the management; or that the business man, having no capital of his own, goes into partnership with a capitalist; the latter being the real head of the business and regulating the policy of the firm, while the former does all the detailed management, and profits are shared between the two. In the latter case the profits of the business partner are not likely much to exceed what a man of such unusual ability would make as the business manager of a large company. In the former case the *entrepreneur* is himself one of the capitalists, *i.e.*, he belongs rather to the class of financier than of *entrepreneur* pure and simple. And this leads us to pay attention to the financier as being that "agent of production" about whose reward there is the greatest difficulty.

We will define a financier as a person who, disposing of a substantial amount of capital, devotes it to businesses over which he exercises the supreme control, or a substantial share, in the supreme control. In order to form a clearer picture of his activity and its reward, we will take a typical case—a case in which he exercises his proper functions with strict integrity, free from any of the stock exchange and other jugglery for which his position often gives the opportunity.

A mineral deposit, apparently valuable, is discovered in some sparsely populated country. The actual discoverer is a "prospector," *i.e.*, a man of rough, uneducated type, but with some practical knowledge of minerals, who makes it his business to wander about the country looking for deposits. He digs a trench or two, and collects a few specimens; invests perhaps two or three weeks of his own time and a little money—a few pounds, and then goes with his discovery to the financial centre. The land, we may

suppose for simplicity, is government property, and the discoverer is entitled by law to certain privileges, which he duly claims. The prospector then hawks his discovery round such financial houses as he can get an introduction to, till he finds one willing to take the matter up. A contract is entered into by which the financial house secures the option for a specified time to take over the discoverer's rights; and in case this option is exercised, the discoverer is to receive a small sum in cash—say £100.—and a percentage—say 10 per cent., on what the option-holders may ultimately receive for the property. The next step is for the financial house to spend a larger sum in obtaining information; they send a mining engineer, who is either a highly-paid employee of their own, or a consultant receiving a fee of a hundred pounds or more, to report on the deposit. If his report is favourable the financial house will either take up the task of prospecting the property thoroughly, or, more probably, will form a syndicate to do so. This syndicate will have a capital of several thousand pounds; of this, perhaps half will be subscribed in cash by the financial house and its friends, while the remainder is nominal capital issued in exchange for the rights; of the latter a small percentage will go to the discoverer, and the rest to the financier; so that, counting also the shares paid for in cash, the financial house has a majority, and has the entire control of the enterprise. The property of the syndicate is the discoverer's rights; these may take the form of a right to mine a certain area of government ground, on a fixed royalty, or, if the land is private property, of a contract with the farm owner, to buy the farm, or the mineral rights in it, for cash or a royalty; such option to buy usually extending for two or three years.

We see here the financier's profit emerging: of the latent value of the mineral deposit something more than half has fallen into his hands, while most of the remainder belongs to capitalists who are inactive, it is true, but who, in taking a very speculative risk, rely chiefly on the reputation for sound judgment of the controlling financial house.

There is, however, no profit at this stage. The property is valueless until a much larger sum has been spent on exploratory work. Most of the capital of the syndicate will go in this way, and, of course, the result may be failure. If the enterprise is successful it then becomes necessary to form an exploiting company, with a working capital large enough to bring the mine—as it is by now—to the dividend earning stage. This may be fifty thousand pounds, or may be half a million. To raise it, an

essential condition is the support of a financial house of standing, which has shown its belief in the enterprise by putting some thousands of pounds into prospecting, and by offering its reputation as a guarantee. Unless backed in this way it is practically impossible to get the public (*i.e.*, the pure capitalists) to subscribe the large amount of cash without which mining and metallurgical treatment cannot be undertaken. The terms on which such a company will be floated will probably be about half to the vendors (*i.e.*, the previous syndicate) and half to the subscribers; and the total capital will be estimated in such a way that the shareholders may hope for good, but not extraordinary, dividends. Thus the new subscribers, taking only ordinary business risks, and expecting an almost immediate return, will get the usual interest on their capital plus amortisation (in the case of a mine) plus an allowance for risk. They are "pure capitalists," and their remuneration can be calculated according to the ordinary rules.

The financial house will now, if it had half the capital of the syndicate, have a quarter of that of the company. It may very probably hold more, especially as the public may not be tempted sufficiently even by the prospecting work that has been done, and by the reputation of the controlling house. In that case the house will have to underwrite (*i.e.*, guarantee the subscription of) a portion of the shares; in other words, it may be compelled to find as much as one or two hundred thousand pounds in cash in order to see the enterprise through.

When, finally, the mine is producing, the revenue from it is spent (a) in paying for labour and other working costs at ordinary market rates; (b) in paying interest on the working capital at ordinary market rates, or something more; (c) in surplus profit, which goes to the prospector, the original subscribers to the syndicate, but chiefly to the financial controlling house. The share of the latter may amount to a very large sum; even, in some cases, to a million or more: according to the usual theory it is the normal price of the services rendered. These services are (i.) the engineering and financial skill spent in bringing the mine through all its preliminary difficulties; (ii.) the expenditure of some thousands of pounds on a venture which has a good chance of failing altogether; (iii.) the financial reputation of the "house" used in support; (iv.) possibly the guarantee of a large sum for working capital, to be recovered from the public by sale of shares when opportunity offers. While the reward is very large, these services are undoubtedly considerable, and it will be found as the current opinion among those concerned in new enterprises, that

the greater reward secured by the financier as compared with the discoverer, the landowner (or in case of manufacturing enterprises, the inventor and the skilled manager), is justified by his greater services.

There is, however, an uncomfortable feeling that while the work of the financier deserves a large reward, the share of product which he actually obtains is excessive, and is tending to increase. Mr. Hobson voices this feeling when he divides any share in the national dividend into a portion needed to bring out the full efficiency of the corresponding agent of production, and a surplus : and remarks that the surplus in the case of labour is trifling, in the case of land is the well-known economic rent, but in the case of capital is a large and increasing profit, which has become the most important and the most menacing economic phenomenon of the day. It is argued that the managing ability of Mr. Rockefeller might have been bought for a few thousands a year, and that the vast wealth he possesses beyond that is a wasteful surplus. We are not concerned here with such ethical judgments ; but the phenomenon is certainly one in which the ordinary theory of distribution, which does not recognise a permanent surplus except in rent of land, fails to satisfy. I think the illustration given above helps to understand why. The financier's share is by no means a reward for skill, plus interest on capital. It is a "quasi-rent" due to the exceptional strategic advantages of a person who combines the two. In order to bring the mine (or manufacture) to a successful issue it is necessary to find someone who can exercise intelligent management of the business, and risk several thousand pounds, at least, of his own money on it ; nothing but his own money will do, for no one who is not actively concerned with the business will put up the necessary capital, at an early stage. In this way competition is very much limited, so that the supply of mining, manufacturing, and other enterprises waiting to be financed, permanently exceeds the supply of financiers willing to take them up. The capitalist-entrepreneur is besieged with offers to use his money to advantage, and is consequently in a very strong position for bargaining. Now we have chosen, as illustration, an enterprise of moderate size ; but the tendency is towards larger and larger businesses, restricting more and more the choice of men capable of financing them.

The important deduction from this is that whereas in land and labour transactions and the employment of pure capital, prices are settled by the interplay of innumerable events, in the finan-

cier's transactions this is not so, and the application of statistical methods is unjustified.

The arguments usually held to connect the return to any factor of production with its efficiency, do not hold in the case of the capitalist-*entrepreneur*. Marshall distinguishes in the actual price paid for land, labour, or capital, a normal element, necessary to cover ordinary costs, and in addition, rents and quasi-rents. The latter arise very frequently, through some temporary scarcity, *e.g.*, when a manufacturer happens to be the only possessor of some particularly useful machine, and is, therefore, able to charge much more than a normal price for the product of it. But the characteristic of a quasi-rent is its impermanence. Other manufacturers will in time become possessed of similar machines, and so the price of the product will fall to a normal level. Marshall accordingly states that in the case of all factors except land, quasi-rents can only be temporary, since the supply of the factor in question can be increased, and must, therefore, be included in calculating long-period prices, though not in short-period. Hence the ordinary manufacturer, though he sometimes makes very large profits, does not, on an average taken over thousands of businesses and a long period of years, earn more than the due wages of his ability. If the arguments of the present article are correct, an exception must be made in the case of financiers' profits: the reason being that the laws of economics are statistical, while we here meet a case to which statistical methods are not applicable. Instead, we find that the transactions involved tend to increase in scale and decrease in number; that they are accordingly restricted to a small class of persons, who enjoy greater strategical advantage, the greater their capital; that, therefore, the largest fortunes increase more rapidly than smaller ones. Hence the supply of financiers cannot be effectively increased, for it is rarely possible for a new competitor to raise himself to the level of the existing financial firms; and hence financiers' profits are—by an accident of the present state of industry—to be classed rather with true rents; that is, in a progressive community they show an unchecked tendency to rise. It follows from this that the amount of profit is not in any essential relation with the service performed. Further, unlike the rent of land, which may be held in portions of any magnitude, large or small, the rent of special capitalistic advantage is necessarily held in large blocks, and tends to constitute an exclusive ring of millionaires.

We return then to this: the play of economic forces distributes wealth in a certain rational way, according with the efficiency in

production of the various factors, and whatever we may, as moralists, think on seeing a sempstress paid six shillings a week while an engineer gets fifty thousand a year, we must recognise the difference in intelligence; and that in some rough way the distribution tends to bring out the best in industry, and cause wealth to grow; further, that the payment of interest on past savings is an essential part of the same scheme for the promotion of wealth in the community. But two exceptions appear. One, the rent of land possessing exceptional advantages has long been recognised; it is easily traced, and taxed, and it is becoming more and more clear that while avoiding injustice to individual investors in land, the State can, and may, appropriate a considerable portion of this unearned surplus for public uses. But while rent of land grows at a moderate rate which can be readily ascertained, it now seems that the rent of exceptional capitalistic advantage grows, and is becoming a very important share of the community's wealth. It is almost impossible to estimate its amount or rate of growth, for such profits are far more elusive than land rents. General impressions are notoriously untrustworthy, yet, in the absence of anything better, one is driven to use them, and it is the general impression that in America the fortunes of the leading financiers are prodigious, and are increasing at a rate nothing less than alarming. This impression may be—probably is—exaggerated, and it is not for a moment suggested that the wealth diffused among other classes of the people is not increasing too. Yet it seems clear that in a country of great natural resources, and peopled by an active and inventive race, like America, everything is in favour of the financier; and of the rapid growth in national wealth, an excessive and increasing share must fall into his hands. In European countries the excess of product over the immediate cost of production is not so great, and financiers have less opportunity of piling up vast fortunes; yet the same tendency is to be seen.

Now a distribution involving this class of rent is bad in the sense that it does not bring reward into relation with efficiency, as economic forces usually tend to do. It is just possible that the example some millionaires have given of bestowing their wealth on public objects may become the fashion to such an extent that the accumulation of capitalistic advantage in a few hands may be neutralised, but it would be very unsafe to trust to such a fashion. It is more likely that a financial aristocracy will persist, as landed aristocracies have in the past. If this be so it means that wealth will be retained in a few hands, which might

be distributed among the people without any risk of drying up the sources of wealth (just as taxation of city ground rents has no tendency to diminish the availability of land). At present the wealth of all classes is growing, so that the disadvantage of bad distribution is not so great as it might be—though there is no lack of laudable public objects for which money is needed. If, however, wages and professional incomes were falling, and the interest on pure capital, there is no reason in theory why financial profits should not continue to grow, at least for a time. It is, in fact, quite easy to imagine a community suffering poverty and depression, in which, nevertheless, the financial classes were growing richer; as have, occasionally, the landed classes in past times. Such a gruesome picture may be out of place, but it is certainly not without importance to make clear the relation in which financial profits stand to incomes of other classes.

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MUNICIPAL SOCIALISM.

It is eighty years since the term Socialism sprang into use, and there is as yet no consensus of opinion with regard to the meaning to be attached to it. We find diversity of usage within the limits of a single country, more especially of Germany, and we find it even in the narrow circle of German savants. And it is here that the very varied interpretations given to the term in the wider circles of politics, of Parliament, the Press, public meetings, and so forth, occasion special difficulties, for the common speech of daily life deals with those very subjects which it is the business of economic science to study and to classify.

The matter is further complicated by the varieties which exist in the common speech of different nations, and the difference between the scientific and ordinary uses of the term. The Christian Socialists of England, for example, have for the past sixty years interpreted Socialism as civic reform, which shall substitute the principle of co-operation for that of competition. At the same time they are at one with the supporters of free competition in their objection to State interference of any kind. The conception of Socialism which is current in Germany they call, by contrast, "State Socialism," because the central idea of German Socialism is an organisation of national affairs very far removed from any system of free co-operation. In Germany, however, the term "State Socialism" is used in quite a different sense. Here Socialism in its most widespread acceptance is Social Democracy, and State Socialism stands for that moderate and more conservative form of economic organisation which is already realised in our present institutions, or at any rate fast approaching realisation. Railways, telegraphs and other similar institutions have all, for kindred reasons, passed under State control, and it is to these new spheres of governmental activity that the term State Socialism is being more and more frequently applied.

In England and in the United States of America we find an
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analogous use of the term in the designation of "Municipal Socialism," pressed into the service to describe every activity of this kind which is undertaken by a city. The recent rise into favour of the same name in the three countries mentioned is due to no accident. The common name expresses the fact that these countries have witnessed a progressive widening of the sphere of action so designated, in all their towns. This is probably most conspicuously the case in Germany, and not least so in several large Austrian towns. A comprehensive inquiry into these details, instituted in accordance with its practice by the "Association for Social Politics" in a large number of German, Austro-Hungarian, Swiss, English, Belgian and Australian towns, brought out these facts very clearly. The general meeting of the Association, held in Vienna on September 27th and 28th, 1909, was devoted to reports and detailed discussions on the question.

II.

The main forms of municipal activity in the modern German towns are as follows: Ownership of land, gasworks, electric works, waterworks, Lombard banks, savings banks, fire brigades, street-cleaning, drainage, tramways, Boards of Works above and below ground, slaughter-houses and cattle yards, markets and market-halls, docks and warehouses, hospitals, disinfecting stations, public libraries and reading-rooms, schools of every kind, and public parks. The majority of these public undertakings involve expenses which must be covered by the funds of the municipality. A certain group of them, however, differentiates itself from the remainder by the fact that they not only serve the public welfare, but contribute a surplus to the revenues of the town. This group includes, *e.g.*, the waterworks, gasworks, electric works, the tramways, slaughter-houses and cattle yards. Out of the 2,590 municipalities in the German Empire (of which 2,309 are urban and 281 rural) 55 per cent. possess waterworks, 52 per cent. waterworks of their own. Ninety-three per cent. of the total number of existing waterworks belong to the community, and their profits are, on the whole, fairly considerable. Gasworks are found in 44.4 per cent. of the communities, and 64.5 of them are in the hands of the municipality. The number of municipal gasworks is also on the increase, though there are several large joint stock companies whose concessions do not expire for a long time to come. The profits earned by municipal gasworks are for the most part considerable; the consumption of

gas, especially for uses other than lighting, is on the increase, and is much encouraged by the diminished price charged.

We turn now to electric works. These were found to exist in 40·7 of the communities, but only 16·8 of the latter had their own works. All towns of more than 50,000 inhabitants have electric works, of which three-quarters are the property of the town, while of the places with a population of over 100,000 four-fifths own their electric works. On the whole, however, the profits from these undertakings are not considerable, presumably because the cost of production of electricity is much higher than that of gas, more especially in the smaller works. In this field we have as yet much to learn by experience.

Tramways are still for the most part under private ownership, though there is a growing tendency to bring them into the hands of the municipality. In some towns, *e.g.*, in Berlin, a large joint stock company serves the greater part of the city, while a new municipal undertaking has grown up by its side. Here the conflict between the two systems is very apparent, and a uniform system under municipal control is seen to be a real need.

III.

The town of Leipzig has long afforded an interesting example of the expansion of municipal activities. In the Middle Ages, when, by the way, a considerable amount in this direction was already being done in Germany, Leipzig owned, in addition to landed property of some importance, a stud, sand pits, a quarry, and, finally, stalls for the use of the fairs which had become events of great consequence. Municipal waterworks and municipal lighting for streets and open places had been in existence for centuries. A municipal loan office and a savings bank were founded in 1826. In 1835 it happened that a certain capitalist wished to promote a company for the construction of gasworks, and so the fundamental question was raised whether private or municipal enterprise should control the supply of gas. The decision was given in favour of the municipality. In the 'forties and 'fifties a warehouse was erected and modern waterworks constructed, both by municipal enterprise. Little by little, however, the citizens and ratepayers began to feel the competition of the municipality, and their jealousy was naturally aroused. Hence in 1892 they refused to sanction a municipal bakery (for the benefit of the poor), although (or perhaps because) this would supply a better quality of bread at a cheaper rate than many

private bakeries. The concession for the supply of electric power, and for an electric tramway service, were at this period bestowed on joint stock companies. The results were so disastrous that the town took over the electric works in 1905. The tramways would probably have followed suit had the conditions of transfer been less unfavourable. The experience of many other large German cities, such as Munich, Düsseldorf, Frankfort-on-the-Main, and Mannheim, has been very similar to that of Leipzig; in each case the tramway system has become the property of the town.

The city most advanced on the path of municipal Socialism is Freiburg in Breisgau, which numbers no fewer than twenty-five different branches of municipal activity. An electric tramway has been running under municipal management since 1899, which does indeed keep the question of financial return subordinate to that of the welfare of the employees of the line. As early as 1831 Freiburg had made a novel departure in municipal enterprise in the shape of a municipal newspaper. An official elected by the Town Council is responsible for the political section of the paper; the art critic is a nominee of the Council, and all advertisements and news concerning the affairs of the town have to pass the censure of municipal officials before going to press. Further, Freiburg has earned an indisputable title to fame by being the first German town to build municipal dwellings, for the benefit not only of the workmen in its own employ, but of the poorer classes in general. Between 1886 and the present day 66 houses, with 222 dwellings, have been erected, and the necessary money for 108 additional dwellings has been voted. The rents are, for the most part, below the average of similar dwellings. Building societies are a recent innovation. Further, the burial arrangements have been under municipal administration since 1877. The municipal possessions in real estate are very considerable. Of the land within the city boundaries 70 per cent. belongs to the town, which makes a practice of selling the most central sites and adding to its possessions by the purchase of outlying tracts. Such property to-day represents a total value of eighty-three million marks.

IV.

So much for municipal enterprise in Germany. In other countries too, and especially in Italy, we find much that is noteworthy. In Italy the striving for national unity had so long absorbed all the best thought, that the movement in favour of

municipal Socialism did not arise until several decades later than in the other countries of Southern Europe. When however the civic problems connected with housing, water supply, traffic, the care of the sick, and the distribution of food came to the front, Italy experienced a municipal revival which took up and carried on the traditions of classical antiquity and of the powerful City States of the Middle Ages. A League of Communes was formed in 1901, which 1,500 municipalities immediately joined. Their aim was local autonomy, and they threatened a general communal strike if the Government should fail to grant their requirements. The local Councils began to resume their economic activities, and there emerged the new ideal of the modern municipality, which extends its activities into the domain of industrial undertakings, and claims to supply all the wants which are common to its members. Under the democratic franchise of the Italian municipalities, the Socialists gained the paramount influence on the local governing bodies. A very large number of the Councils are socialistic, headed by socialist mayors, and have given the municipalisation of the public services a definite place on their programme. Nor is this attitude towards municipal trading confined to the Socialists. Men of all parties are in sympathy with it, and Councils other than Socialistic are putting it into practice. The force which the movement has gathered, more especially since the beginning of the twentieth century, is most clearly exemplified in the vast technical literature which exists on the subject. And as long ago as 1898 a Government inquiry testified to the existence of 71 municipal slaughter-houses, 15 gasworks, 21 electric works, 151 waterworks, 12 cemeteries, and so forth. The ground for fresh developments was broken by the Municipalisation Act of 1903.

The municipal bakeries of several Italian towns afford very interesting examples of the most recent forms of this activity. Even in the Middle Ages the municipalities had concerned themselves with the question of bread supply in the public interest, and these arrangements had persisted until early in the nineteenth century, when they were obliged to yield to the growing pressure of the demand for free competition. In the last decades a number of rural municipalities in Friuli began to erect communal bake-houses in order to fight the pellagra scourge by the supply of cheap wheaten bread. Since 1899 the Councils of several large towns, of which Cremona was the first, have thoroughly investigated the subject and have propounded schemes for the abolition of the three main abuses of private bakeries—the excessive price

and bad quality of the bread, the insanitary condition of the bakehouses, and the unsatisfactory position of the bakers. Oddly enough, none of these towns have so far achieved the erection of a municipal bakery, and the pioneer in this respect has been Sicily, the darkest spot in the kingdom. In 1902 a municipal bakery was erected in Catania, which at a single swoop completely revolutionised the production of bread in this important sea-port town. In the shortest possible time the municipal bakery had monopolised the trade and driven the private concerns out of the field. A single energetic man, the very popular socialist mayor of Catania, achieved this result, practically unaided. He watched his opportunity and utilised a favourable moment. The master bakers had struck against the imposition of a municipal bread tax; the mayor stepped in, and with the journeymen bakers who had been thrown out of employment, established the municipal system overnight. The bakery supplied 45,000 kilogr. of bread daily for 160,000 persons. The first quality was retailed for 22-35 centimes, as against the previous price of 30-46; the workmen's wages were raised, and the conditions of labour improved by the introduction of machinery and the utilisation of better workrooms. This went on for four years. The popular mayor was considerate enough to find employment for the superseded master bakers and workmen in the sale of bread and other occupations. This, however, prejudiced the success of the undertaking, and a Government Commission brought it to an untimely end. Nevertheless, municipal bakeries have during the last few years sprung up in more than twenty cities, of which Palermo is the largest. But they aim at providing for a portion only of the total consumption, and so bringing indirect influence to bear on the rest of the trade.

V.

The time-honoured discussion regarding the advantages and drawbacks of public, as compared with private undertakings, was naturally renewed at the Vienna meeting. It may safely be asserted that the one new fact, brought out by the experience of various countries, which gained the most recognition, was the relation that exists between the constitutional arrangements of a country and its municipal possibilities. The difficulties which admittedly stand in the way of municipal activity in the United States, or which occasion abuses under existing municipal arrangements there, do not necessarily arise in other countries.

With regard to the experience of German cities, Professor Fuchs, who reported on this question at the Vienna meeting, and to whom great credit is due for his conduct of the whole inquiry which preceded the discussion, attributed the high standard of civilisation which our modern towns have attained solely to the influence of municipalisation. The movement in Germany owes its extension and success to a variety of causes—the capacity of the men at the head of the local administrative bodies, the spirit of emulation which drives every city to adapt to its own use whatever improvements have been made anywhere else, the existence of a well-trained professional staff of officials and employees, who are regularly appointed for life, the high standard of integrity universally prevalent among them from highest to lowest, and lastly, the well-maintained balance of power between the administrative bodies and the Town Parliament. We do not deny that there are drawbacks everywhere. There are always drawbacks for the simple reason that every human institution, like every human being, has the defects of its qualities.

The vulnerable point of municipal Socialism is, of course, the multiplication of officials which it entails, and this favourite reproach was naturally not omitted in Vienna. It is unfortunately impossible to carry on, without a bureaucracy of some kind, any great undertaking, whether this be in the hands of a large joint stock company or of a public body, and whoever cannot brook a bureaucracy must put up with small concerns in all the branches of social and political life. The business of a small tradesman needs no bureaucracy, nor yet the administration of a village. Anything beyond this, however—a great centralised business, the organisation of a large number of active persons, the administration of a State or town—cannot be satisfactorily accomplished without the help of trained, professional men. Without the co-operation of such an official class self-government becomes impossible, unless there should happen to be, in exceptional cases, persons who are both willing and able, merely as members of a free community, to devote themselves entirely to its service, and to undertake the duties which would fill the working life of a professional class trained *ad hoc*. The majority of persons, especially in the twentieth century, are so much taken up by the mass of their private interests as to have little time, inclination, strength or capacity left for the fulfilment of public duties. Each, or at any rate most of them, have their own occupations, and have no wish to undertake any other for the State or community. The State and the community, therefore,

must be served by professional men who devote their lives to their public office, just as others devote themselves to industry, art, science, or whatever their private avocation may be.

This necessity does not prevent the very persons whose attitude towards public affairs is directly responsible for the increase of officialdom from complaining of this increase. Distant critics, too, in foreign countries seem to derive consolation for deficiencies in their own systems of administration, from the blame which they lavish on the German bureaucracy. There was a speaker at the Vienna meeting who actually lauded the corruption of American municipalities on the ground that this achieved better results than the integrity of the German bureaucracy. It is only fair to add that he voiced no general opinion.

For the rest, it is no accident that questions of this kind are to-day continually pressing into the foreground of public interest and scientific debate. At the biennial general meeting of the "Association for Social Politics," in 1905, several days were devoted to the discussion of the relations between the Government and coal-miners and their syndicates. There followed a discussion of the problems of mammoth industrial undertakings and the relations of these to their workmen. In 1907 there was a debate of several days' duration on the constitution and administration of towns, prepared for by a series of volumes on the law and practice of a large number of Town Councils in Germany and other States.

These are the ever-recurring great questions which claim an increased share of the attention of nations, and more especially of economists, every year. Owing to the magnitude and difficulty of the problems it is not likely that great changes should be made in existing conditions in the near future. Nevertheless, it seems certain that the development in the direction of municipal Socialism will increase in force and extent wherever the conditions are favourable. Perhaps another age may discover methods, of which we have no conception, to overcome the obstacles that lie in the path of progress to-day.

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THE POVERTY FIGURES.¹

It is the purpose of this paper to deal critically with the figures that are usually quoted as a measure of the amount of poverty in England. I hope that this purpose will not be misunderstood. It is not my aim to minimise a great social evil; nor, indeed, does any result of that kind follow from this study. But it does seem to me that the time has come when some protest should be made against wrong inference from, and the political exploitation of, the investigations that have been made into poverty.

Of these inquiries there are three whose results are widely known and quoted—by Mr. Booth, Mr. Rowntree, and Mr. Chiozza Money. The first two are local and detailed; the last is national, and derived from a more general study of statistics. The first two give about one-third of the people as poor; the last gives nine-tenths. This divergence itself guards anyone who feels compelled to look deeper.

The results obtained by each inquiry are here to be accepted. Criticism of the methods and results of the Booth and Rowntree inquiries has been made, especially by Dr. Loch; and on the basis of his memorandum the Committee on Physical Deterioration has passed over the poverty inquiries. But it appears to me that a great deal must have depended on the practised insight of those actually engaged in the work; and that we must take their figures as an approximate measure of the thing they defined and sought for.

In the inquiry of Mr. Money, anyone is taken as poor where the family income does not exceed £160 per annum. He has recently suggested that £180 would be a better figure. His results show a startling inequality of distribution, since half the national income is owned by one-tenth of the people, and one-third of the income by one-thirtieth of the people. But I should rather call this an inquiry into riches, or simply into distribution, for the following reason: The average family income of the nation is slightly below £200 a year. If, then, the poverty line

¹ Read to the British Association, Sheffield, 1910.

is at £160, it would have to be admitted that we are badly off *as a nation*; since the average, which would result from an equal distribution, is only 25 per cent. above the poverty line. It is, I suppose, true that the reason why we cannot afford the very large incomes of some classes is just that our average income is not high; viewed with reference to all the goods that are purchaseable, and which enter into the conventional life of even the middle classes, it is low. But it must be plain that, if Mr. Money's standard of poverty were adopted, the evil could not be charged simply against the distribution of wealth; it would be charged, too, against the earning power of the whole resources of the nation, which yield on the average so slight a margin. For that reason, and also because £160 would not commonly be regarded as poverty by the masses of the people, it would be better to take Mr. Money's inquiry as one into distribution rather than into poverty. It has the advantage of being a national inquiry, and I do not wish to do more than call attention to its startling results.

The local inquiries of Booth and Rowntree have been more widely quoted, and their results are stereotyped in modern political discussion. Both parties find them equally useful: the Tariff Reformers, because they obtain under our present fiscal system; the Free Traders, because they show how hardly a small increase in cost of living would bear on the people. They constitute the fact that is perhaps best known about England to foreign nations.

As these inquiries are only two, no national inference ought to be drawn from them unless, *first*, the thing investigated was in both cases defined the same way, and *second*, there is a great degree of agreement in the results. Neither of these conditions is fulfilled in this case; and the differences are so great, and the subject so important, that I trust my criticism will not appear to be carping or merely controversial.

Mr. Booth's definition of poverty¹ takes all persons in London as in poverty who are considered to earn up to 21s. a week for an average family. It is, of course, possible that so definite a standard was not carried about by the investigators; and, in fact, it is evident that a great deal was intrusted to their judgment. But Mr. Booth has clearly stated that this income line is, at any rate, the approximate measure of the thing he investigated; so that it must be this definition or none at all. In the same way, the "very poor" are those, whether so defined at first or so classified in the end, who earn up to 18s. a week

¹ *Poverty*, vol. i. p. 33.

for an average family. Of the former there are 30·7 per cent., and of the latter 8·4 per cent. in London.

But Mr. Rowntree has counted two things, where Mr. Booth has counted one. He does not only measure those who are poor because of income, but those also who are poor because of expenditure. And as his income line is 21s. 8d. for an average family, his primary poverty closely corresponds to Mr. Booth's total poverty. Since from this 21s. 8d. basis he proceeds to measure a class of the poor who have greater incomes, it is evident that his inquiry is not simply different in kind of definition, but necessarily wider in scope than Mr. Booth's. Indeed, secondary poverty is by far the greater part of Mr. Rowntree's results. On this ground, therefore, I should venture to demur to the letter from Mr. Booth, printed in Mr. Rowntree's book, to the effect that the inquiries are broadly comparable. So far as comparison by income goes, Mr. Booth's 30·7 per cent. of persons having up to 21s. is to be taken with Mr. Rowntree's 10 per cent. of incomes up to 21s. 8d.

The question then arises whether it is possible, from the data of the two inquiries, to compare the same thing in the two places. How much of Mr. Booth's poverty is there in York, and how much of Mr. Rowntree's poverty in London?

As Mr. Rowntree has given a table of incomes,¹ the first question can be answered with great accuracy. He found that 8·5 per cent. of the people of York earned up to 21s. a week. And this would be the right comparison, if there were no difference in the cost of living. But according to the recent *Report on Cost of Living of the Working Classes* (Cd. 3864), rents and prices in London are 15 per cent. higher than in York, the index figure for York being 87. The York equivalent of 21s. in London is 18s. 3d. Now according to Mr. Rowntree's income table, 2·6 per cent. in York earn up to 18s.—say, 3 per cent. up to 18s. 3d. So that, on the bare figures, we get a very wider divergence, one result being ten times the other.

It is less easy to answer the other question, and find how much of Rowntree poverty there is in London. As to primary poverty—income up to 21s. 8d.—there is 10 per cent. in York, and something over 30·7 per cent. in London. But as secondary poverty depends on the habits of the people as regards expenditure, it is not possible to proceed with the comparison except on the assumption that the working classes of the one city do not, taken in the mass, differ in prudence from those of the other. On this assumption, there would be 15 per cent. of secondary poverty

¹ *Poverty*, ch. ii. fn.

in London. For Mr. Rowntree's 18 per cent. of secondary poverty is derived, according to his income table, from 53·1 per cent. of the working classes earning over 21s.; and if the same ratio is taken of Mr. Booth's 45·6 per cent. of the working classes having over 21s. a week (Classes E and F, excluding servants), we obtain about 15 per cent. of secondary poverty in London. Thus, corresponding to Mr. Rowntree's total 28 per cent. of poverty of both kinds, we have in London (30·7+15) or 45·7 per cent., at least. This is increased when allowance is made for the higher cost of living in London. The London equivalent of Mr. Rowntree's primary standard of 21s. 8d. is 24s. 11d. All up to 24s. 11d. ought, therefore, to be counted in London, as being in primary poverty, whereas we have only been able to count all up to 21s., and have taken the secondary ratio (about one-third) of these between 21s. and 24s. 11d. It is, I think, a safe conjecture that this would bring Rowntree poverty in London up to 50 per cent.

We thus obtain a table as follows :—

	York. Per cent.	London. Per cent.
Booth's standard	3	30·7
Rowntree's standard	28	50

I do not think that anything but difference was to be expected from a comparison of a provincial city with a great centre of casual labour. The convergence of two of the corner figures has been seized on in political controversy; but they depend on different standards, and it would be as legitimate to contrast the other corner figures of the table.

It will be seen, therefore, that the results for either city prevent us from regarding the other city as typical of the nation. The inquiries check each other; and the safest ground is to keep them in their separateness.

Since we are in possession of index figures for different places and times, it is possible to extend the inquiry into poverty by adopting Mr. Rowntree's standard in any other city. We should thus obtain uniformity, as well as a standard based on a precise calculation. My purpose has only been to show that we are not at present in possession of figures which can tell us the amount of poverty in the nation; and to make some protest against the political exploitation of two great studies of the people. A uniform inquiry might show a greater or a less result than that which is tossed about in controversy. The statement that the number of the poor is, or approximates to, one-third of the people, is not based on evidence which bears scrutiny.

D. H. MACGREGOR

REVIEWS

Unemployment and Trade Unions. By CYRIL JACKSON. With a Preface by the RT. HON. VISCOUNT MILNER. (London : Longmans. 1910. Pp. xi + 320. Price 1s. 6d.

THE special significance of this book lies in the names of its author and of its sponsor. Here is one of the leaders of the Moderate party in the London County Council, a man of long experience in the investigation and relief of distress, advocating a rational system of insurance against unemployment. And here is one of the foremost of Unionist statesmen, not simply commending the proposal, but singling out for peculiar and emphatic approval the contention that this insurance can best be administered through trade unions. Unemployment insurance, it is clear, is not going to become a party question. In the coming Parliamentary discussion men of goodwill from both political camps will be working towards a common purpose ; and this ought to have a beneficial effect on the form of the measure.

Mr. Jackson's chapters are rich in information and suggestion over the whole range of the problems directly or indirectly associated with unemployment. It is insurance, however, that is just now in the forefront of public attention ; and it is to Mr. Jackson's treatment of that topic that we must especially address ourselves.

I find no reference, either in Mr. Jackson's book or in Lord Milner's preface, to one of the gravest of the difficulties in the way of unemployment insurance ; and that is the danger lest insurance should itself increase unemployment. We are apt to take the percentage of unemployment under existing conditions, and to assume that it is with that percentage we shall have to reckon, actuarially and administratively, under a *régime* of insurance. Yet it is not difficult to see that insurance may quite conceivably increase the irregularity of employment by weakening the motives which do at present, to some extent, influence employers in the direction of continuity. Two motives are, at

present, in operation. Employers will often take some trouble and incur some risk to keep their labour force together, in order to be instantly ready for returning prosperity. But a system of public out-of-work benefit (unless accompanied by energetic coercive action on the part of labour exchanges) may tend to check the dispersal of discharged workmen: it may keep them in their homes waiting for trade to pick up—waiting for their old employers to whistle them back.

And employers frequently keep men at work—manufacturing “for stock,” for instance, even when it is quite hazardous—from motives of sheer humanity. I cannot but think that when the employer knows that a discharged workman has, at any rate, the insurance fund to fall back upon, he will feel that the State has, to some extent, relieved him of responsibility. He will feel this even more strongly if—as no doubt will be the case—he has himself to contribute to the insurance fund. He will feel that he has paid for the right to engage his labour just as discontinuously as may seem expedient.

Opinions will differ as to the extent to which feelings of responsibility and humanity do at present affect the conduct of employers. I by no means contend that they influence all employers in all trades. But I cannot agree with the extreme opposite view, that competition and pecuniary interest so completely dominate the industrial field already that the present effect of a sense of responsibility or of humane kindness is quite negligible. From what I have learnt of Midland conditions, I am convinced that such feelings still have a good deal of effect, especially in old-fashioned small or medium-sized businesses. And we may, I think, fairly put the argument in a general form thus: fluctuations in employment are in a large measure the outcome of competition; the working of competition is hampered by “friction”; one form of friction is the sense of personal responsibility on the part of employers for the men who serve them; a national system of insurance will weaken this sense of responsibility and lessen the “friction”; and, as a result, competition will work more “smoothly” for the employer—with the resultant consequences, good and bad.

That this is not an imaginary danger will be evident if we consider the somewhat parallel case of labour exchanges. It is hoped that labour exchanges will help to “decasualise” labour; and it does certainly seem that they are capable of being used in that direction. But it would appear, from the instructive article of Mr. Heath in the last number of this *Journal*,

that there is reason to believe that labour exchanges as they are now being worked in Germany are actually having a certain "casualising" effect. "Many of the leaders of the trade unions," we are told, "assured the writer that the system of employing men for short periods, sometimes a few hours, was on the increase. And even some of the managers of the labour exchanges admitted that the exchange was helping on this tendency." There is, apparently, little statistical evidence available; but the one piece of statistics that Mr. Heath is able to adduce is certainly rather disturbing. For it appears that in the labour exchange in the Berlin brewing industry, managed by a joint committee of masters and men, a distinction is drawn between "permanent" and "temporary" posts, and the proportion of temporary posts to the total number filled by the exchange has steadily risen from 42 per cent. in 1900 to 78 per cent. in 1909. We cannot but realise how easily possible it may, unfortunately, be for an institution actually to increase the evil it was designed to remedy.

How the danger is to be met, I confess I do not quite see. Something might perhaps be done to penalise employers of exceptionally irregular labour. Some rebate or discount might possibly be allowed to employers on the amount of their contributions, in proportion to the length of service of the men insured or the regularity of the employment during the year. Complications would arise where workmen had voluntarily transferred themselves to other employers; and, to meet this and some other contingencies, there would seem to be a need for some system of corporate responsibility on the part of the employers in a trade—as in the German accident insurance. Where the real responsibility lay with the State, as consumer of munitions of war or other stores, it would, one might hope, soon come to be realised that the higher charge upon employers for discontinuous service would have to be paid by the State in the shape of higher prices. Yet, in these cases, as in industry in general, it is hard to see how a penalty could be imposed heavy enough for the purpose.

I do not, indeed, hold that a failure to overcome this difficulty would necessarily condemn the whole scheme. It may be held that a large measure of insurance would be so great a boon that it would be well to introduce it even if employment were thereby made somewhat more irregular. But we ought, at any rate, to face the situation.

The immediate purpose of Mr. Jackson's book and of Lord

Milner's preface is not to argue for insurance: that they practically assume as bound to come. Their object is to urge that the State's share in the future scheme shall take the form of subsidies to trade unions. In urging this policy, they take for granted, apparently, that the Osborne judgment is not going to be reversed. It is pretty obvious that, if the unions are to regain the power of coercing their members to contribute towards the support of members of Parliament of one particular party, the country will hesitate to arm them with fresh powers to draw in new members. For the present, perhaps, the matter may be discussed on the assumption that the Osborne judgment is not going to be reversed. If that is so, there are exceedingly strong reasons why unemployment insurance should be effected through the unions, *so far as the unions already have a system of out-of-work benefit*. It will be shown later that this statement by no means disposes of the question. But let us look first at the reasons for doing the thing that way, if it be possible. To my mind the strongest reason is that, unless it is done that way, insurance will inevitably weaken the unions by diminishing the motives which lead men to join them. At present, with those unions which have out-of-work benefit—and they are the great majority—a desire to insure oneself by means of membership against the risk of loss of employment is one of the strongest forces bringing in new members. If a man can (and, if he takes no steps, must automatically) insure himself, even though less perfectly, without joining a union, this altered position may just determine the balance of motives in the direction of staying outside. It must be remembered that some of the unions most likely to be affected have, even as things are, great difficulty in keeping up their membership. Thus the unions in the building trades have spent large and increasing amounts during the last decade in unemployed benefit, and in recent years this item has accounted for almost, if not quite, a third of their total expenditure; and yet their membership has been steadily declining (from 253,000 in 1900, to 163,000 in 1909). It would not be surprising if strenuous opposition were offered by such unions to any setting-up of fresh counter-attractions outside the union.

A second and almost equally weighty reason for making the State contribution a supplement to independent trade union payments is that this is by far the most effective method within sight of providing against fraud or laziness on the part of claimants. The officials of a trade union are usually in a good position to know why members are out of work; and, so long as

they have anything to pay out to them from union funds, they have the best of motives to keep down the number. It must, however, be borne in mind that this motive will only operate with its present vigour so long as the payments disbursed come from the union's own funds. Mr. Jackson, like some other writers, proposes that a State subsidy should be given to those "less well-paid trades which have" hitherto "not been able to secure sufficient contributions" from their members "to enable them to pay unemployed benefit." He is of opinion that such a State subvention—if, we must add, its benefits were to be enjoyed only by joining a union—would "enormously encourage the unions and add to their membership." But unless it was made conditional on the unions' instituting at the same time an out-of-work benefit of their own, the mere passage of the State subsidy through the channels of the union would be no guarantee for its economical distribution.

So much, then, for the reasons in favour of using the unions. But now we come to the crux of the whole matter—the question of the attitude of the State to the non-unionist workmen. The evident conclusion from the foregoing considerations is that State assistance should be given only through unions and to their regular members; and to the present writer this would seem in itself the best solution of the practical problem. It might well bring with it less evils than the alternative courses and more advantages. It would, it is true, involve something very like compulsory unionism; though it is by no means certain that this would work out into a more belligerent unionism. But, for obvious reasons, such a solution is not "practical politics" in England at present. Mr. Jackson's solution is suggested by a provision in the Danish law, and is as follows:

"The case of the man who does not belong to the union in his trade could be met by allowing him to join the unemployed benefit fund alone and pay subscriptions to that independently. This principle of joining a union for one benefit and not for others is quite well established. Men are allowed to subscribe for sick benefit or not at their own discretion; and, though at present all members must pay contributions for trade purposes, there is no more inherent difficulty in accepting membership in respect of unemployed benefit without dispute benefit, than in allowing a man to subscribe for dispute without sick benefit" (p. 38).

We may well doubt, to begin with, whether Mr. Jackson quite realises the magnitude of the extra task he is asking the unions to undertake. To take one example: In Sir H. Llewellyn Smith's

Prussia is of special interest at the present time in view of the promise of the Government to undertake next session the re-organisation of the system of Exchequer contributions. The history of our grants has been so frequently told, and their absurdities so thoroughly exposed, by economists and administrators, that we scarcely expect to find anything new in the third of the volume devoted to England. It gives, however, a clear and concise critical account of the grants which serves admirably as an introduction to this very complicated subject.

On the other hand, singularly little information has hitherto been available to English readers regarding the financial relations of central and local bodies in other European countries, and Mr. Watson Grice's able and thoughtful description of the systems which prevail in France, Belgium, and Prussia deserves to be recommended to all students of public finance. An explanation of the apportionment of financial burdens among the different authorities in these countries presupposes a general acquaintance with the functions and powers of the local bodies, as well as with the amount of central administrative control over them, and upon each of these points the author tells us quite sufficient for the purpose without going into great detail. In regard to finance, his method of treatment is much fuller; the special local imposts, the central taxes to which local additions are made, the transfer of taxes from the central to the local bodies, the financial relations between the larger and smaller authorities, and the schemes of central subventions to particular services, are all treated with a lucidity which can be appreciated only by those who have tried to obtain similar information for themselves.

Although for the most part the author devotes himself to explaining the changes which have been made during the past century in the countries under review, he finds occasion in the last few chapters, when dealing in general terms with the resources of local authorities and the divisions of responsibility for national and local services, for some expressions of opinion upon suggested amendments to the English system. The proposal to allow local authorities to levy additions to the income tax in the manner adopted in Prussia does not commend itself to him. The Prussian tax is not liable to such frequent alterations as ours; it is more highly graded; it is less in amount for central purposes; it is not very largely levied at the source; compulsory declaration is carried much further; incomes over nine hundred marks are taxed, and the communes may commence still lower; perplexing problems arise in localising income, and local varia-

tions of income tax additions lead to migration of the wealthier persons. On the whole, therefore, while granting that the system works out with considerable satisfaction in Prussia, Mr. Grice thinks that here it "would probably not work well either from the point of view of the individual, or of justice as between the local authorities." Very little can be expected, too, from the transfer of particular taxes from the national to the local authorities, and so the author is concerned to lay down some general principles which should govern the administration of grants-in-aid. Most of these are sound, if somewhat familiar, suggestions towards reform. The first, that "grants should only be given to services in which the general interest is predominant," appears to conflict with some remarks in the preface by Mr. Sidney Webb, where he urges that there is no service in which the community as a whole has not an interest, and therefore a duty, to prescribe a "national minimum," and to use the expedient of grants for that purpose. The presence of a general interest, and not its predominance, seems to be sufficient in Mr. Webb's view to justify resort to grants, though he would vary the amount according as the interest of the community as a whole is more or less important. That they should be conditional on efficiency, so arranged as to minimise the inequalities between districts in respect of loco-national burdens, and should not be given to objects which directly and obviously raise the value of fixed property in any locality, will be generally agreed. But when Mr. Grice adds that, subject to the fulfilment of the foregoing conditions, "the grants should, as far as possible, and in view of all the circumstances, for financial and administrative reasons, be kept at the lowest proportion necessary to achieve all the purposes of grants-in-aid," we wonder whether to consider it a truism or an error. Certainly if all the purposes of grants are achieved, nothing remains to be said in criticism of the amount, but we are inclined to urge that for some services the grants should not only be arranged with a view to minimising inequalities between districts, but should be as high as possible, the limit for both purposes being that the spending authorities must have every motive for reasonable economy. How high a proportion of the cost of education or of poor relief that may be, depends upon administrative questions, the methods of the grants, and the degree of central control. Possibly the difference between us is mainly one of emphasis, but in our view Mr. Grice does not sufficiently appreciate the desirability of removing certain burdens from the locality to the fullest extent permitted by considerations of economical administration.

STANLEY H. TURNER

Wool-growing and the Tariff. By C. W. WRIGHT. Harvard Economic Studies, V. (Pp. xiii+362. 1910.)

IN "purer" moments the economist may be tempted to wish in his heart that England had a tariff, just because it would raise so many "neat" problems. Dr. Wright's study, which covers the whole of United States history, should help to discourage such lamentably irresponsible musings. Most of the "neat" problems are insoluble: they are most insoluble of all at the time when a solution chiefly matters—when tariffs are in the making. Throughout this detailed inquiry taxes on wool constantly do what they are not expected to do, and leave undone what was hoped of them; and the main results for the student of economic theory are those broad, by no means neat, results about the working of tariffs that he knew already.

There have been taxes of some sort on wool brought into the States ever since 1816, save for the short exciting period of free wool in the 'nineties. And this is Dr. Wright's summary of summaries. (If anything, the book has too many summaries.) "The most that can be said for the tariff is that it has somewhat increased the number of sheep in the country, chiefly since the war and during the time after the rise of the industry in the Far West," i.e., since the 'seventies (p. 323). "Somewhat" is to be interpreted modestly, for elsewhere (p. 305) Dr. Wright italicises the fact that in 1897 the chief ranching States of the Rockies—Montana, Arizona, Nevada, Wyoming, and Colorado—*"ended the period of combined industrial depression and free wool with more sheep than they had at the beginning,"* a fact which cannot but lead one to raise the question how necessary the protective tariff is for the wool-growers of this section." Later statements, however, suggest that for "is" in the last clause we should read "was," since at the close (p. 325-6) the facts are emphasised that the wool clip of the U.S.A. is less than it was in 1892-4; that on the whole it is likely to decline; that she is becoming increasingly dependent on imports; that, therefore, "if the industry is to be maintained in a position of the same relative importance as formerly, a higher tariff will be necessary." Upon the problem of general policy, no opinion is expressed, but elsewhere Dr. Wright is, very properly, not even quite sure that this hypothetical higher tariff really would maintain the relative importance of the wool-growing industry, for dearer wool means more substitution. "Against such rivalry the tariff is impotent."

These are some of the unknowns, or shall we say uncertainties, that spoil the problems.

The main, and very great, interest of the book lies outside the tariff question altogether. In tracing the history of wool-growing, Dr. Wright throws his net wide. The tariff, he shows, has been a subordinate force throughout. Manufacturing and commercial developments, the competition of English woollens and New England cottons for the favour of the consumer, the rivalry of cattle with sheep on the ranges of the West and of butter with mutton on the farms of the East, the unequal effects of reduced cost of carriage on the profits from wheat and wool growing, and a score of other considerations, have from time to time changed the character, location, and fortunes of the American flocks. And the changes are worked out on the grand scale, and at the characteristic American speed, over the face of half a continent.

Nothing is more fascinating in the whole study to a Britisher than the American's rapid—often unfortunately rapid—response to every economic stimulus. He huris himself into merino-breeding early in the nineteenth century, and hurls out of it for a time with curses a few years later. An English market for cheese developed in the 'forties, and in the East "whole towns and counties sold their sheep and bought cows" (p. 130 n.). At that time the Middle West was becoming the chief home of the flocks. Enter the railway and the great European food-stuffs demand. Promptly the Western farmer "forgot all about his little flock, and reverted to his first choice—the wheat, corn, pork, and beef" (p. 149). The Civil War artificially stimulated wool-growing in all districts. In '68 came a disastrous fall in wool prices—"four million sheep were killed in that winter" (p. 201). Later fruit-growing drove most of the sheep out of California, and they have only rested, so to speak, in the arid plateaux of the Rocky Mountain belt. Even there they are pressed by rival users for some of the ranges and by that competition from the southern hemisphere which elicits the hint of a yet higher tariff.

In hardly any case have there been revivals in deserted districts. I have often been struck by the amazingly small development of sheep-rearing as a part of general farming in the older States, and could wish that more had been said about this. As an economic justification we are reminded that "in the most progressive parts of Europe the number of sheep has steadily decreased in the same manner as in the older sections of the United States" (p. 320-1). Now so far as the United Kingdom

is concerned, this is not the case, as Dr. Wright's own tables partly show. There has never been anything at all comparable to the fall in New England and the Middle Atlantic States from 4,000,000, the average for 1890-3, to 2,200,000, the average for 1904-7 (p. 298). Taking the same averages for the United Kingdom, the fall was only from 32,600,000 to 29,100,000, and there has been a marked recovery since 1907. At no time since 1870 has the number for four consecutive years averaged much over 33,000,000; and in 1880-3 it was lower than in 1904-7. Dr. Wright at times seems to assume that, as part of general farming, sheep-rearing must of necessity be on a small scale. Well, there are about twice as many sheep in Lincolnshire as in all New England, and most of the Lincolns are raised on "general" farms.

No doubt the Yankee farmer knows his business. Perhaps the size of farms or the demand for dairy produce, on which Dr. Wright lays stress, offers a partial explanation. Yet with us a dairying county of rather small farms, like Cheshire, manages to keep about three times as many sheep as Massachusetts. A more fundamental cause, I take it, as Dr. Wright explains for an earlier period, is the old American dislike of "sheep meat," which makes catering for the joint mutton-wool demand relatively unprofitable. But we learn without surprise that the mutton demand has grown steadily of late (p. 310-2), so perhaps we may shortly see a nearer approach to English farming methods in the East. There should be room for it, on the wool as well as on the mutton side, for increasing quantities of British wools have been going to the States of late years. Whether their exact qualities can be reproduced over there I do not certainly know. That is the worst of wool. The characteristics that make it so unfit for grading and futures make it hard to argue about in the lump; hard, too, to tax scientifically. Of this last fact also there are plenty of illustrations in Dr. Wright's exhaustive book.

J. H. CLAPHAM

Die Deutschen Getreidezölle. By L. BRENTANO. (Stuttgart & Berlin: Cotta. Pp. 67.)

THE subject which is treated in this memorandum tests the general breadth and accuracy of an economist's scholarship rather than his power of original research. So much work has been done upon the accessible material that we cannot expect any great extensions of knowledge. There is, however, room for an authoritative summary of established conclusions, and it is this,

apparently, at which Professor Brentano has aimed. The result is not altogether satisfactory. There is ample evidence of wide reading and intellectual agility, but we do not find that measure of lucid arrangement and exact thought which work of this kind peculiarly requires.

The arrangement suffers from an attempt to interweave a history of the corn duties with an analysis of their effects, the result being that whilst analytical problems are taken up and dropped and resumed in bewildering fashion, we nowhere get the clear narrative of facts which would be most useful. The reader will not find it easy to discover from the narrative the exact dates at which the reductions made by Count Caprivi, or the increase made by the tariff law of 1902, came into operation, and he will have to piece together from different parts of the paper the author's views on the incidence of the duties and other theoretical questions. On the analytical side we distinguish two chief problems. Firstly, that of the effect of the duties on German agriculture, secondly, that of the incidence of the duties. These problems are, of course, intertwined at several points, but they are sufficiently distinct for us to take them separately.

(1) *The Development of German Agriculture.*—Professor Brentano shows conclusively that the duties have not made Germany independent of imported food, and are not likely to do so in the future. The German nation is becoming more and more urban and industrial, its standard of living is rising, the land available for agriculture cannot be increased in the future as it has been in the past, it is more likely to be diminished by the further spread of industry and the development of means of communication. Nor is it possible to obtain in Germany the same high product per acre as is obtained in England, for the protective system keeps inferior land under the plough. The discussion of the extent to which agriculture is benefited by the corn duties is less happy. The author attaches great importance to figures which show that 75 per cent. of landowners—i.e., all those with less than five hectares and some larger properties—consume more corn than they produce. The usual reply of protectionists to this line of attack, viz., that the corn duties are part of a general scheme, and that proprietors who are not benefited by them are benefited by duties on meat or dairy produce, does not seem to be known to him. He deals only with the claim that the duties which encourage the growth of corn benefit, indirectly, producers of meat, &c., by reducing domestic competition, since men are led to grow corn who would otherwise raise cattle. He dismisses

this claim on the ground that high corn prices reduce the demand for meat, and increase the cost of producing it. Much more important than the problem of the effects of the corn duties, considered in isolation, is the question of the effects of the tariff as a whole upon agriculture. It seems to us at least arguable that the value of agricultural land *generally* has been raised by protection, and that small as well as large proprietors have been benefited. And, indeed, in another connection the author insists on the rapid rise in the value of agricultural land. It is, no doubt, true that the corn-growers gain more by protection than the meat-producers, just as in this country the corn-growers have suffered most under free trade. But when we concede this the question whether meat-producers gain or lose on balance remains undetermined.

Professor Brentano would, perhaps, have spoken with less assurance on this subject if he had not convinced himself that even to corn-growers protective duties are of no permanent use. His argument on this head is remarkable. He ascribes the inability of German corn-growers to meet foreign competition to the high price of land. But since, he tells us, the price of land is raised in proportion by every increase in the corn duties, it follows that *no* corn duties can, in the long run, enable German landowners to meet foreign competition. The answer to which is that since rent does not enter into the cost of production, the price of land is determined by the profits of agriculture, and cannot itself determine them.¹

(2) *The Incidence of the Duties.*—The reasoning on this problem is ill-arranged, and, as it seems to us, often confused. Two distinct questions are raised: First, the extent to which German prices exceed prices in free trade areas; second, the

¹ This curious argument deserves full quotation. After showing that it is the price of land rather than wages or interest which disables the German corn-grower in competition with other countries, the author proceeds as follows, p. 22: "Was aber ist der Zweck des Getreidezolls? Er soll den Getreidepreis steigern. In dem Masse, in dem dieser Zweck erreicht wird, steigt die Geldrente, welche der Boden abwirft. Der Minimalpreis des Bodens aber ist gleich der Geldrente die er abwirft, kapitalisiert mit dem herrschenden Zinsfusse. Entsprechend der gesteigerten Geldrente steigt also der Bodenwert . . . Die Folge der Getreidezolls der seinen Zweck, die Steigerung der Getreidepreise, wirklich erreicht, ist also die Steigerung eben der Theile der Landwirtschaftlichen Produktionskosten, wegen deren Höhe das Inland mit dem Ausland nicht konkurrieren kann. Da der Getreidezoll das Verhältnis des Bodenertrags zum Bodenwert nicht verändert hat, bleibt der Getreidebau nach wie vor unrentabel. Bleibt der Landwirt, gleichviel ob Käufer oder Erbe, beim Getreidebau, so ist er notwendig alsbald wieder nothleidend. Dann erschallt aufs neue der Ruf nach abermaliger Erhöhung des Getreidezolls. Und so geht es fort. Es ist eine Schraube ohne Ende."

extent to which the exclusion of corn from Germany lowers prices in the world market. At the outset, the author admits that the excess of German over world prices does not decide the question of incidence: in later passages he seems to suggest that it does. The exposition is at least so far defective as to leave his opinion doubtful.

The problem of determining the extent to which world prices are lowered and German prices raised by the duties is attacked with the aid of a formula derived from Gregory King's figures for the elasticity of the English demand for wheat at the close of the seventeenth century. On the assumption that Germany imported about one-sixth of its wheat, and that this one-sixth equalled one-fiftieth of the consumption of the rest of the world, it is calculated that import duties might raise prices 57 per cent. in Germany and reduce them by 4 per cent. in the world market. Although the authority of Tooke is quoted in support of Gregory King's figures, we are not persuaded of the wisdom of attempting such a precise statement of the incidence of the duties. It is generally admitted that the elasticity of the English demand for wheat is not now what it was in Tooke's day, even if it was then what it had been when Gregory King wrote. What justification is there for assuming that King's tables give an accurate statement of the elasticity either of the German or of the world demand? In fact, this appeal to King suggests a very imperfect understanding of the theory of demand, and this suggestion is strengthened by what follows. "The slight reduction in the world price from 1 to 0.96 would quickly come to an end," we are told, because "the consumption per head of the non-German nations, which consume corn, is still capable of great increase."¹ Has not precisely this capacity been allowed for already in limiting the fall of price in the world market to 4 per cent.? The cause which more probably *might* raise the price of corn to its former level, viz., limitation of supply, resulting from the smaller profits of farming or opening up new land, is not mentioned. The conclusion is that Germany must pay the whole duty. "The foreigners would have to bear a part of the duty only in the event of their being forced to sell corn in Germany in liquidation of pressing obligations."¹ At this point we come to the apparent confusion between the problem of discovering the effect of the German duties on world prices and the problem of comparing German prices with those of the world market. The researches of Matlekovits, Lexis, and Conrad into corn prices in Germany and untaxed countries respectively,

¹ P. 14.² P. 15.

showed that on the average German prices exceeded world market prices by less than the duties down to 1894. The conclusion has often been drawn, and seems to be accepted by Brentano, that foreign countries bore the balance of the duties. For this, however, the facts observed offer no warrant. If Germany lives part of the year on home supplies, or if part of Germany lives all the year on home supplies, average German prices may well be less than average world prices plus the duty. It does not follow that when Germany *does* buy from abroad the price is less than the world price plus the duty. We may, in a word, be certain that the value of imported corn *when it is imported* always exceeds the price in the world market by the amount of the duty. The problem is still to discover the extent, if any, to which world prices are reduced by the reduction in German demand. No statistics of the relation between *average* German and *average* world prices throw any light upon this problem. Such statistics are only of importance in calculating the *total* burden which rests on German consumers, for they *do* throw light upon the extent to which any rise that takes place in the price of imported corn is transmitted to home-grown corn. It is, of course, true that if the delivery of corn to Germany were controlled by a monopoly, the price charged to German importers might be lowered without the same concession being made to other buyers; and something like this situation was, it seems, actually realised in the case of Russian rye. The Russian Government met the duties in some measure by reductions in the export freight rates on Russian railways, and, in so far as this was the case, the price of imported rye in Germany would, no doubt, have exceeded, by less than the duty, the price of rye within the Russian frontier, assuming that the reduction was limited to rye booked through to Germany. A writer who had really sure footing on the theoretical side would, we think, have given a detailed account of these Russian freight reductions. We should like to know exactly what reductions were made and at what times, also what is the evidence for supposing that they were solely attributable to the German duties. None of these points are dealt with in the memorandum.¹

We have room for only a few other remarks. On p. 19 the author refers to statistical evidence of the connection between fluctuations in crime and in corn prices. The statistics are quoted in the appendix.² It is at least conceivable that such statistics give an erroneous impression of the amount of crime

¹ P. 14.² P. 50.

really due to protection. We may admit that temporary fluctuations of food prices away from their normal level produce considerable fluctuations in the number of crimes. It does not follow that if the normal level of food prices be changed permanently there will be a comparable change in the normal number of crimes. Morality has probably a certain power of adjusting itself to permanent changes in the standard of life. On the same page the author insists on the injury done by the corn duties to the producers of articles consumed by the masses, especially boots and clothing. This line of argument is hardly admissible, except in so far as *alteration* in the corn duties may have made the demand for boots and clothing irregular. The politician who wishes to get corn duties abolished will, of course, persuade as many trades as possible that they will gain by the change. An economist ought to understand that when corn duties have been long established such gains will be of the nature of "unearned increment." A sufficient account of the evil effects of corn duties has been given when we have (a) determined the loss to the national dividend caused by diverting labour and capital from producing, *e.g.*, boots and clothing to producing corn, and (b) analysed their effect on the distribution of this reduced dividend between rich and poor, workers and non-workers. One of the most interesting sections is the discussion¹ of the importance of the duties to German national security. Several points are brought out which are not universally recognised. It is shown that German agriculture is enormously dependent at harvest time on Russian and Austrian labour, and that the difficulty of gathering the crops with this labour cut off and large German armies in the field would be considerable.

We have purposely dwelt in the main upon what seem to us to be serious defects in this memorandum. The case which Professor Brentano had to present is a strong one, and the bulk of what he has written, as also the lengthy statistical appendices, offer much indisputable evidence that the corn duties are a great evil for the existing German people. We are not so hypercritical as to blame the author for failing to discuss at length some of the arguments which appeal to the German agrarian economists. He could not, for instance, have dealt with the ethical and social opinions of Professor Wagner without exceeding the space to which he has limited himself. We are, however, justified in expecting rigidly exact thought from a writer who decides to avoid the more nebulous aspects of the controversy, and

¹ P. 23, 24.

to concentrate upon the issues which are, strictly speaking, scientific. It was with this expectation that we approached Professor Brentano's work, and we confess to a certain measure of disappointment.

H. O. MEREDITH

Wertzuwachssteuer—Theorie und Praxis. By DR. F. LIFSCHITZ, Privatdozent at Berne University. (Berne : Max Drechsel. 1910. Pp. 32.)

THIS slight essay hardly does justice to its subject. The theoretical side of the question of unearned increment taxation is treated very summarily, and the only practical experiments in this form of taxation here considered are those of Frankfort and Cologne. There is not a single reference to the British Budget Bill of 1909, now duly legalised, nor yet to the Imperial and State projects for taxing "increased values" which have been put forward in Germany. Dr. Lifschitz cordially approves of the public appropriation of a portion of the unearned increment in land values in the form of taxation, and he welcomes this taxation as another proof of the overthrow of "Manchesterism" or the doctrine of *laissez faire*. Answering the objection that while real estate is being subjected to this tax the windfalls which are incidental to some forms of industrial and financial enterprise escape, Dr. Lifschitz pleads that the monopolistic character of land justifies special treatment, though he is willing to impose an unearned increment tax on industry as well. To those who say that the tax is Socialistic, he replies that such a contention betrays loose thinking, and he invites them to take the trouble to understand what Socialism really means. If an unearned increment tax, which secures to the community a certain modest share of increased value due largely to social influences, is Socialism, what shall be said of succession duties or progressive income taxes in their higher scales? Stating rather than discussing—with a cautious brevity—the question whether a tax of this kind is transferable from the seller (upon whom it always falls in the first instance) to the buyer of a property, the author takes a negative position, but convincing reasons are not given. Of practical, administrative questions considered—again all too cursorily—the principal are: Should an unearned increment tax be "direct," i.e., periodical, or "indirect," i.e., incidental to property changing hands only; and should it be a State or a local tax? As to the former question, Dr. Lifschitz

advocates "direct" and "indirect" taxation conjointly, and as to the latter he prefers local administration, inasmuch as "local conditions would then receive more consideration." It does not occur to the author that local conditions might, under such circumstances, receive too much consideration, for which reason the principle of British unearned increment taxation seems thoroughly justified—State valuation and assessment, while the proceeds are divided between the community *in toto* and the local authorities. On the whole the essay cannot be said to add to our information. Apart from its incompleteness as a statement of facts, the theoretical treatment of the question is inadequate. Sometimes Dr. Lifschitz is much too dogmatic, but more often he is halting and undecided.

WILLIAM HARBUTT DAWSON

Das Eibenstocker Stickereigewerbe unter der Einwirkung der Mode. By ALBERT RASCH. (Tübingen: H. Laupp. 1910. Pp. vii + 166. Price 4 marks.)

THE psychology of fashion has long been a favourite topic with social philosophers in their lighter moods, but the economic aspect of the question, the possibly far-reaching effects which fashion may produce in an industrial community, have not hitherto attracted much attention. The writer attacks the question with reference to the embroidery of Eibenstock, which is essentially an article of fashion. He describes the nature of the industry, and sketches the rise of the little mountain town, which numbered no more than 8,724 inhabitants at the time of writing. The "moment" in its history was undoubtedly the time which saw the introduction, and the rapid rise into popular favour, of the crinoline. This article involved a liberal use of flounces, frillings, laces, trimmings; and what not, the demand for which immediately rose to an unprecedented degree. Eibenstock made the most of the opportunity, and the invention of the "hand machine" in 1830 reacted on the demand by cheapening the finished product. The quantities demanded were enormous, and no very high standard was applied to the quality. The youthful industry conquered the market.

In 1872 the tide turned. The crinoline, disappearing among the wealthier classes, persisted for a while among the poor and in remote country districts, but its day was doomed, and with its fall came the decline in the demand for the cheap trimmings of Eibenstock. From 1872–80 the industry went through a period

of terrible depression, from which it eventually emerged, maimed but still living.

It is not to be supposed that fluctuations in fashion are the only dangers to which an industry such as that of Eibenstock is exposed, nor can all the chances and changes, all the evil moments which the town must live through, be attributed entirely to the never-ceasing search after new effects in personal adornment. Fashions as a rule do not change very brusquely. It is commonly supposed that the Parisian lady and her tailor exercise exclusive sway over the feminine garb of the civilised world. This, says the writer, is an error. The Paris tailor makes models: he cannot decide who will copy them. The popularisation of a mode depends on a variety of circumstances, among them the capability of existing industries to adapt themselves to the production of the article in sufficient quantities. The all-compelling crinoline, we imagine, must have been materially assisted in its victorious career by the ease with which the trade turned out vast quantities of worthless trimmings. A fashion, if circumstances are favourable, spreads to wider and wider circles of correspondingly diminished means. As regards the accessories of feminine clothing, such as the embroideries which Eibenstock produces, changes in fashion are usually chiefly a matter of detail, of design, pattern, &c. Here the industry can speedily adapt itself, and the necessity for such change produces in the working population qualities of energy and versatility which are valuable assets in an industrial town. Nevertheless, the dividing line between a change of fashion which merely requires recourse to fresh patterns, and a change which will throw an entire industry out of gear, is a very narrow one.

There are, however, other dangers which have wrought more mischief than the whims of fashion. The little town has permanently to face the competition of better equipped, better trained, and better situated workers. These have successively deprived it of all its staple products. At the end of the 'seventies the under-linen industry had gone to Berlin, the embroidery had been depressed by Swiss and Saxon competition, and the international demand for trimmings soon showed itself a thing to be little relied on. None of these influences have any connection with fashion, while, on the other hand, the embroidered trimmings, which now form the main industry of the town, are very much at the mercy of changes in the popular taste.

The industry is largely a "homework" one. The men who have saved enough to purchase a machine work in their own

homes helped by their wives and families, and with all the attendant evils, of which however the writer has very little to say. There is practically no organisation and very little effort at bettering either conditions or output. The best that can be said is that the climate is healthy, the workrooms good (the machine is large enough to require a separate room, and good light is essential), and that the people have learnt to hold their own and turn their means to the best account.

H. REINHHERZ

Studien über die Entwicklung der Warenhäuser in Deutschland.

By DR. KÄTHE LUX. (Jena: Gustav Fischer. 1910. Pp. vi+208.)

A STRIKING illustration of the tendency of modern times to undertakings on a large scale is seen in the development of the general stores, more especially in Germany, where the butcher, the baker, the candlestick-maker, all keenly feel the competition of the big concern round the corner. The subject is interesting in many ways, and Dr. Lux has collected a great deal of information on the general stores in Germany. Her method has been to send round questions to owners or directors, and when we remember the inherent tendency among such people to keep particulars of their business to themselves, it is astonishing to observe how much Dr. Lux has gleaned.

She deals with the rise and growth of the stores, with the number; status, and pay of the employees, and considers at great length the supply and distribution of three commodities in particular—china ware, jams and pickles, books. The work is wholly descriptive; and tells its story clearly and directly, fortified at every step by references. While a good deal of the book is taken up with conditions in Germany, one or two points suggest themselves by way of comparison with English conditions. Thus, for example, does the living-in system prevail in Germany? Apparently not. Or again, is it as true for this country as for Germany that by far the preponderating proportion of employees in the German stores are women?

Where Dr. Lux considers the economic aspect of the stores, what she says applies generally. How the work is organised, how the commodities are produced and the prices fixed, the influence of stores on the production and consumption of a country, their advantages and disadvantages—all these points are carefully handled. The large number of tables in the appendix add to the value of the treatise.

M. EPSTEIN

Kapital und Kapitalzins. By PROF. E. VON BÖHM BAWERK.
Zweite Abtheilung. *Positive Theorie des Kapitals.* Dritte
Auflage. Erster Halbband. (Innsbruck: Wagner. 1909.)

AT the end of twenty years the author of the *History of the Notion of Capital*, and of the *Positive Theory of Capital*, reviews his work in a preface to the third edition of the latter book, which is now to have two volumes. He has good cause for satisfaction with the results of his labours. He has not only worked out theories that have been recognised in many quarters as fundamentally right, but he has virtually prescribed the lines on which discussion of the whole subject has been proceeding for the last twenty years among economists, and is still proceeding. Even if he had made no converts, this were a feat of which an author might well be proud.

He is far too modest to pronounce the surveyed work "all very good," but he retains most of the positions occupied in 1888. They were not occupied without abundant care and study and thought. He has taken opportunity at various times to defend them dialectically, outside of the solemn printed books of two or three hundred pages. His pen has been at work not only in German and in Austrian journals, but in English and American.¹

The results of those various discussions are garnered in this new edition: and the issue is a more thorough and patient examination of details than is quite agreeable to those readers, even economists, who prefer small books to large. But the author escapes the reproach of evading difficulties. There is none too small to be faced by him; and every loophole is stopped where he can stop it. He certainly does not "look a difficulty boldly in the face and pass on." He allows himself to pass on only when the consideration has been, so far as he can make it, exhaustive. If he has erred in discursiveness, it is a failing that leans to virtue's side.

He found he could not be equally exhaustive in discussion of individual authors without producing a volume of intolerable length. But, even for discussion of the details of the main argument, fulness makes more demands on the reader than the reader's leisure will permit him to concede, if he happens to be a student of economics but not a professional or academical teacher thereof.

In addition, therefore, to the two hundred pages of the book itself, we find nearly as many pages of *Excursus*, desirable reading but not essential. They are chiefly on the exact bearings on the main theory of the greater fruitfulness of longer as against shorter

¹ See the publications reviewed in this *Journal*, June, 1900, and September, 1904.

ways of production, of invention, skilful selection, increased quantity of capital, set against longer ways of applying capital with shortening as result, and such topics as the relation of the main theory to the rehabilitations of the old Socialistic view that interest is defrauded labour.

The main theory itself is retained. The value of present as against future goods is still of the essence of it. Concessions are made in detail to criticisms from various quarters, including the Editor of this *Journal*, Professor Wicksell, and Professor Irving Fisher (Pref., p. v). The campaign is not yet over but, so far as it has yet proceeded, its battles are more fully recorded and described and studied in these pages than in any single volume elsewhere. "Almost every year new attempts are made to define the disputed notion [of capital] in a way that shall be final. As yet, unhappily, they have had no decided success. On the contrary, many of the attempts have only led to the appearance of more combatants on the field of battle and given fresh fuel to the strife" (22).

JAMES BONAR

Handbook of Practical Economics. By J. SCHRIJVERS. Translated from the French by F. M. CAPES. (London: Sands and Co. 1910.)

THERE is room in the literature of political economy for a treatise written with the hard syllogistic exactness of a scholastic text-book. It would not be at all amiss that clearly defined and unchanging meaning should be affixed to such terms as wealth, capital, labour, industrial freedom, and that the reasoning in which such terms are employed should be cast in the rigid forms employed by the scholastic disputants. But for such advantages we should look to the trained theologian, and it is doubtful whether men whose training has been theological are best fitted to discuss the issues with which political economy deals. This reflection will occur at once to the reader of M. Schrijvers' book. He is everywhere concerned for the ethical and religious interests connected with the questions which he treats; and though he admits, at the outset, that political economy has its own subject matter and its own methods—which are not those either of ethics or of theology—he too easily forgets the distinction on which he has insisted. He disapproves of Liberatore's view that economic science is not distinct from the science of morals, but at every turn he lays himself open to a reproach of much the same kind. To take an example: what are we to say to this statement:—

"The *formation* of capital is entirely due to *renunciation*, and this is not taught practically—still less efficaciously—except by the Church"? We have heard the formation of capital ascribed to "saving" and to "waiting," but the use of the term "renunciation" in this connexion is a novelty and not a happy one. To talk of Mr. John D. Rockefeller practising "renunciation" in the amassing of capital is to credit that gentleman with a disposition of soul of which he is hardly conscious. Men do not "renounce" wealth or the satisfaction which wealth brings when they store up capital; they are striving for more than they already possess. Renunciation, as taught by the Church, is a moral virtue; nobody, we may be assured, would be more surprised than the great capitalists to learn that their accumulations were an evidence of the practice of Christian virtue in an eminent degree. Again, was there no formation of capital antecedently to the founding of the Church? Did men not learn—practically and efficaciously—to adopt the practice, be it of "renunciation" or other disposition of mind, which utilises wealth produced for the acquisition of further wealth? And is this not done at the present time in countries where the Church has not the opportunity of teaching "renunciation"? Religion has, no doubt, its relations with economics, just as it has its relations with law, medicine, and politics. But the basis—the data—of the science of economics is furnished by Nature—human nature included—as completely as is the basis of the other sciences. To exaggerate the place of religion in the relations referred to is not a service either to religion or economics.

The view above criticised is, we may safely hold, an exaggeration; so, too, is the following:—"Association, if it is to be powerful—and, still more, desirable—must have religion as its basis." Scholastic philosophy insists on the Aristotelian axiom that man is a "social animal." If this principle be admitted, we are forced to conclude that association is a natural necessity of human nature. It is the associative tendency with which Nature endows man that the economist has to do with, and which for him works itself out in the various forms and details of organised industry. Religion may sanctify such organisation—as it may sanctify any other human activity—but religion is not the foundation of association, any more than it is the foundation of the marriage which it blesses.

As might have been expected, the author gives a large place to the discussion of Socialism. The chapter on this subject is one of the best in his book, though the sketch of Marx's theories is defective, and the difference between "State Socialism" and

"Socialism of the Chair" not clearly discernible as put by him. To his strictly economic teachings exception might frequently be taken. His definition of capital as "an economic good destined to be the instrument of a fresh production" has its obvious difficulties. The proposition that "division of labour presupposes direction by a single head" is still more questionable. Even in his application of scholastic conceptions to economics he lays himself open to criticism. Discussing the production of wealth he mentions three causes as concurring to the result: the material cause, Nature; the formal cause, Labour; and the instrumental cause, Capital. From this enumeration we miss what we should have thought the most important, namely, the efficient cause. But, surely, labour is that cause; and it is a misuse of scholastic terms to describe it as the formal cause. Here and there the author's meaning is not obvious, but this may be due to the translation, which is not, one is inclined to think, the work of an economist.

T. A. FINLAY

Principes de la Politique Régulatrice des Changes. By M. ANSIAUX (Instituts Solvay) (Brussels: Misch & Thron. Pp. 259.)

THE author, who is a Professor at the University of Brussels, discusses foreign Exchanges and the problem of protecting the bank reserves, mainly with a view to showing that these things cannot be left to settle themselves, but call for a *politique régulatrice*. He has much to say against what he conceives to be a classical doctrine of *laissez-faire* as applied to the foreign Exchanges, a doctrine the application of which is supposed to be typified by the refusal of the Bank of England in the early half of the nineteenth century to regard itself as bound to maintain the national gold reserve. It would be perhaps difficult at this date to point to any recognised English authority on questions of banking who does not accept the view that the maintenance of the gold reserve is a matter requiring more attention from the State than the maintenance of an adequate supply of hardware, or even of corn. One feels that in his anxiety to insist upon the need for a *politique régulatrice*, the author goes too far in sharpening up contrasts between the view which he is advocating and that which he is anxious to attribute to the "classical school," and even to their descendants. Like so many Continental writers he insists on attributing to them a wooden-headed belief that everything will be for the best if everyone will pursue his own obvious immediate interest in the most shortsighted way. Thus

it is a pure misuse of words to interpret the maxim *laissez-faire* as an injunction to bankers to do nothing when threatened with a run on their reserves.

On the other hand, the contrasted policy of *régulatrice politique* is interpreted in a way which covers rather more than an English reader would expect. When the Bank of England raises the discount rate and has to make the rate effective by borrowing the surplus supplies of money, the operation is described as *politique* because the bank is not simply recognising the existence of an increased rate forced upon it by circumstances, but is pursuing a policy involving deliberation and foresight. This "hardly seems sufficient reason for using the word *politique*, but the author does, as a matter of fact, find a better justification for the word in the fact that the bank, when it takes this course, is doing something which could not be done if it had not an exceptional position in the money market.

Another attack on the "classical school" is found in the chapter dealing with the theory of international trade, which the author seeks to demolish by arguing that an export of gold does not lower prices, as things are now, such exports being too small to affect seriously the quantity of effective "money." But the argument apparently is merely that exports of a million or two in gold would have no effect on prices if the bank refrained from raising the rate of discount.

It is not disputed that a rise in the discount rate lowers prices, but M. Ansiaux would say that the export of gold does not necessitate a lowering of prices, because the bank is not compelled, or, at least, is not always compelled, to raise its rate in these circumstances, but does so of choice. That the bank does so act is, however, all that the theory of international trade requires.

The accepted method of meeting a threatened excessive drainage of gold by raising the rate of discount involves inconvenience to purely internal trade, and a lowering of prices. The much discussed question to which M. Ansiaux seeks to find a solution is whether it is not possible to find a means of dealing with the foreign Exchanges without disturbing the domestic standard of values, or at least without such frequent disturbances as are actually experienced. The practices of all the leading and some of the minor European countries are discussed in a very penetrating and interesting manner, and the discussion of the problem of foreign Exchanges in countries having paper currencies is also characterised by clearness of insight. The author makes out a very good case for his contention that the depreciation of

inconvertible paper currencies is the result more frequently of unfavourable foreign trade balances than of wilful over-issue. In fact the country with an inconvertible paper currency, prudently managed, can realise the ideal of a stable standard of domestic values, but at the cost of a very troublesome state of fluctuation in the exchange value of its paper for purposes of foreign trade. But the author does not recommend a return to paper currencies, and the upshot seems to be that there is no real "solution" of the problem.

There is much interesting discussion of the position of practices of the leading banks, leaving the impression that some further developments are required in the British system. The author seems rather to favour the idea of entrusting the maintenance of the reserve to an association of banks under government supervision, as such an association could take steps to avoid severe calls on the gold reserves in a manner impossible under a *régime* of free competition.

Belgium, in which M. Ansiaux is naturally interested in a special degree, suffers the inconvenience of a frequent unfavourable rate of exchanges, and has adopted, for protection of its gold reserves, an exaggeration of the French policy, which the author condemns. The policy of the Bank of France in charging a premium for gold required for export works tolerably, says the author, only because the exchanges are normally in favour of France, and the hindrances to gold exports are, therefore, of only temporary importance. Belgium is quite differently situated, and her policy almost amounts to an inconvertible paper currency system. The author comes finally, therefore, to a discussion of *correctifs extra-monnaires de la balance des comptes*—such as encouragement of the use of capital at home instead of in foreign investments, in particular, the development of a national shipping industry. Discouragement of certain foreign enterprises, such as insurance companies, which take money out of the country, is also suggested. There appears to be some confusion of thought in this part of the book, because the investment of Belgian capital abroad, though tending to make the Exchanges unfavourable for a time, brings in interest or dividends subsequently; and foreign enterprises in Belgium imply, presumably, in the first instance, bringing foreign money into the country. The author does not seem to be unaware of the fact that these things cut both ways, but he does not make it very clear. He is at his best in the other sections of the book, which are quite interesting and repay study.

Les Abonnements d'Ouvriers sur les lignes de Chemins de Fer Belges et leurs Effets Sociaux. By ERNEST MAHAIM.
(Brussels: Misch & Thron. Pp. 259.)

ONE of the most striking features of modern life is the extent to which railway travel has entered into the life of the people. There are few who do not make a journey in a train in the course of a year, and many who travel frequently. For pleasure, cheap excursion trains are largely used by the working classes, whilst workmen's trains take them to and from their work at low fares. Extensive as this travel has become, it has received little attention at the hands of economic writers.

Some five years ago Professor Mahaim commenced to investigate the use made of the cheap railway tickets for workmen in Belgium, and the immediate outcome was a paper¹ read before the British Association at the York Meeting in 1906. The inquiries which preceded that paper have been followed by further extensive investigations, and the results of the whole series have been embodied in the substantial volume now under review.

Belgium presented a peculiarly suitable country in which to begin the investigation of workmen's travel. In no country in the world is the regular travel of workmen "so relatively large, so cheap, and so intensive." Professor Mahaim has, however, been handicapped by the lack of adequate official statistics of the State railways and by the relative backwardness of the privately-owned railways in following the lead of the State railways in the matter of workmen's tickets. In consequence the statistics on which his conclusions rest frequently cover only short periods of time, and relate to selected places and areas. Great care has been taken in selecting times and places so as to make them as representative as possible.

In contrast with the practice in this country, in Belgium great care is taken to ensure that the tickets are only used by genuine workmen. Further, the definition of 'workmen' is so restricted that even tramway conductors are excluded on the ground that their work is not "essentially manual." In spite of these strict limitations, it is computed that some 20 per cent. of the workmen make use of the workmen's tickets; whilst the passengers holding these tickets represent some 42 per cent. of the total number of passengers.

In studying the figures recording year by year the amount of

¹ Subsequently published in the *Royal Economic Journal*, December, 1906.

workmen's travel, it is necessary to bear in mind that the regulations have been altered from time to time. Fares have been reduced, the limit of distance for which tickets are issued has been increased by stages from 20 to 100 kilometres, and the State railway system has been extended by the absorption of private railways as well as by the construction of additional lines. Keeping these points in view, it is found that the amount of workmen's travel clearly marks years of industrial crisis. Thus in the years 1901 and 1908 we find the workmen's journeys actually declined. Investigation, however, showed no clearly defined monthly or seasonal variations.

As might be anticipated, tickets for six or seven journeys per week are not issued in large quantities at stations where the tickets for one journey per week are numerous. It is the exception to find the workman travelling daily for long distances; whilst, equally, the workman with his home a few kilometres only from his work rarely takes a ticket for one journey per week.

Further, the travel is not all to, or all from, a place. There is frequently an exchange of workers—the skilled for the unskilled, the worker in one trade for the worker in another. Some towns actually send out more than they attract from the country and other towns. This output from towns is partially due to employers carrying out work at a distance wholly with their regular staff. A builder, for instance, who has obtained a contract at a distance, instead of sending a foreman and one or two specially skilled men to the job and obtaining the rest of the workmen locally, will send practically all the men necessary, workmen's tickets being used. The greater efficiency with which the work is executed is more than sufficient to cover the low cost of the travelling.

As the passengers holding workmen's tickets constitute some 42 per cent. of the total, the question of the tickets being remunerative to the railways, or the reverse, is an important one. No categorical answer is given, but Professor Mahaim expresses an opinion that no loss is incurred. If it could be shown that lines and stations would be practically as they are if the extra passengers induced by the workmen's tickets were non-existent, then the opinion is probably correct. This supposition is, however, hardly possible, and there is grave room to doubt whether the profits arising from the tickets is sufficient to remunerate the capital expended purely in consequence of the workmen's travel. As the railways are mainly owned by the State the point is of less importance than it is in this country,

since, if on the whole the community gains, the loss is also borne by the community and not by a selected body of shareholders.

The exodus of the rural workers to the industrial districts is found to take place in Belgium as in other countries, and it has been alleged that the workmen's tickets have accelerated the movement. There is good reason, however, to think the reverse is the case. To some extent travel with workmen's tickets is an alternative to seasonal migration or permanent emigration to the towns. Once there has been emigration return to the country is difficult. So long, however, as the worker lives in the country he has an attachment there, and, if work fails in the towns, he will, in many cases, seek work in the country near his home. Moreover, the high proportion of towns in Belgium of from 5,000 to 20,000 inhabitants, and the comparative absence of the huge aggregations of population to be found in England and Germany, for instance, point to a greater dispersion of the population. This Professor Mahaim attributes to the extensive use of workmen's tickets. A most desirable outcome of this dispersion is seen in the comparative absence of overcrowding in the workmen's dwellings, a matter which has claimed much attention in other countries.

As regards wages, the tendency seems to be in the direction of a general levelling. Wages in the towns are lowered by the ease with which workers can come in from the country, whilst wages in the country districts are raised. At the same time wages are not subject to such large fluctuations between seasons of prosperity and adversity. The army of industrial workers is more readily increased when trade is booming: in fact, at such times firms send agents into the country districts to recruit workers. The success of the agents would be much less marked if emigration to the town were necessary. The tendency is in the direction of making the market for labour co-extensive with the country, to make the movement of labour from place to place as work moves as easy as possible. This increase in the mobility of labour must be reckoned as a great gain.

The matter cannot, however, be left here. What effect has this movement to and fro on the character and health of the worker and his family? As regards the worker, there is good and bad. The working-day is lengthened by the time spent on the journey, and this means additional fatigue. This is comparatively small when the journey is short; and the majority of the journeys are short since the average length is barely 19 kilometres. When, however, the distance is considerable, daily travelling is most

undesirable, as it wears out the worker when still young. The advantages of sleeping and spending the holidays in good country air, and of the gardens attached to the country cottages, only need mention. To the wife and family they are boons, which make for a strong and healthy race. The most serious evil seems to be drink. Factories, shops, &c., do not start work at the same hour, and some workers must travel by trains which arrive an hour or more before the workshop opens. The time is too apt to be spent in the *café*. Exactly the same trouble is to be noticed in London and other places where cheap workmen's tickets are used. It seems difficult to devise efficient remedies.

The workers travelling once a week must lodge. The workmen's lodgings in Belgium, it appears, are not as a rule good. They are frequently overcrowded. Often they are attached to places where drink can be obtained. All too frequently the worker falls a victim to drink, immorality, and disease. It would seem as though the question of workmen's lodgings requires a thorough investigation. The advantages of the long-distance workmen's tickets are too great for anyone to advocate their abolition on this ground.

We must not omit to notice the very low rents which workmen in Belgium pay for their houses. It is true the rents are lower absolutely than when considered in conjunction with wages. Still, however they are looked at, they are low. Amongst others, two causes contribute largely to this. The first, the absence of very large towns in Belgium, in spite of the great average density of population. The second is the residence of a great number of the workers in the country. Both these seem to be a direct outcome of the Belgian system of workmen's tickets. In this connection the influence of the tickets on the ownership of their houses by the workers may be noticed. The great objection to workmen buying their houses is that the ownership tends to fix the workman to a place. His mobility is impaired. The general system of workmen's tickets as it exists in Belgium certainly modifies, if it does not wholly remove, the objection.

Throughout the figures and records are given on which conclusions are based, and the book also contains numerous maps and diagrams.

Professor Mahaim has carried out an investigation of great importance, and its results are worthy of study, not only by those interested in railways, but even more by those interested in the question of the congestion of population in our large towns. What has been done in Belgium could not, perhaps, be done in any

country in which the railways are not State-owned without the railways being subsidised. Railway managers in this country, for instance, are almost unanimously of the opinion that workmen's tickets to-day entail a loss on the railways. If the fares were reduced to anything like the Belgian level, and the availability of the tickets extended over the whole of the railways, it would be manifestly unjust to saddle the railway proprietors with the cost.

W. T. STEPHENSON

Standards of Reasonableness in Local Freight Discriminations.

By JOHN MAURICE CLARK. (Columbia University Studies.)
(New York: Columbia University. 1910. Pp. 155.)

In his search for a standard of reasonableness, Mr. Clark has retouched the theories of economists and reviewed the decisions of tribunals. We shall briefly notice some out of the many topics on which he has shed new light.

With reference to the law of cost pertaining to railways, Mr. Clark well exhibits the connection between *joint cost* and *discrimination*. In his definition of joint cost he follows in the main Professor Marshall; while he entertains the question which has exercised American economists, "whether it is proper to apply the law of joint cost to a plant producing a homogeneous output as well as to one whose output is of several kinds" (p. 28). The cognate concept of "special" or *prime cost* is well presented; its relation to the magnitude of the object to which the term is applied has seldom, if ever, been so clearly stated.

"When one relates the term 'special cost' to a definite increment of traffic, one finds that it spreads into more and more kinds of expense in proportion as the traffic increment is increased in size" (p. 33).

"If a traffic manager has under consideration a rate, an inter-related schedule of rates, or a rate policy, that affects *large volumes of traffic*, he must consider, as the special cost of the traffic he is valuing, a large share of items usually classed as general or constant" (p. 35).

So the special cost of an aggregate of numerous services is not the sum of the special costs of each (p. 37 *et passim*).

Does cost, when properly interpreted so as to include general expenses, afford the ideal standard for apportioning railway rates? To carry out this idea we might add to the cost of operation, varying with the distance over which a commodity (of an assigned class) is hauled, a sort of *tax* which would not vary with the distance. This tax would have to be supplemented by an

equal tax—a sort of *excise*—on goods sold in places which have access to railway carriage, when those goods have *not* been carried ~~on~~ a railway. Otherwise we should be *protecting* local producers against others in the neighbourhood who might be more efficient, and so violating the principle which underlies the proposed ideal: that each producer should get the benefit of his “natural” advantages. The writer admits that such a scheme is “fantastically unlike anything we are likely to see.” But he seems to think that the difficulty of apportioning the general cost, which constitutes the “vitating element” of such a scheme, is reduced when we consider large units of traffic of which the “special” cost, as above explained, includes a considerable share of the general expenses.

Instead of the cost of a service to the railway, may we take as our standard the value of the service to the shippers? In this connection it is well observed by Mr. Clark:—

“The value of any service may then be defined as that charge which will in the long run bring in, over and above the special cost of the traffic involved, the greatest clear return possible” (p. 55).

This canon of monopoly is not to be identified, as some eminent writers have conceived, with the principle of “equality of sacrifice” in taxation.

“There might be between railroad self-interest and truly ‘equitable concession’ as wide a difference as that between ancient systems of taxation, aiming only at the largest obtainable revenue, and a modern system intelligently based on the tax-bearers’ ability to pay” (p. 64).

The inappropriateness of the term “sacrifice” in the sense in which it is applied to taxation is thus further argued:—

Who are the payers of rates, and in what sense are their sacrifices equalised? In what sense can we speak of their sacrifices at all? If a transportation service involved a true sacrifice it would never be made (p. 65).

The doctrine applied to discriminate in favour of the weaker producers might lead to the perpetuation of the economically unfit (p. 66).

Will competition suffice to secure reasonable rates? Not desperate war between railways; not the “semimonopolistic truces of an anomalous competition” (pp. 42, 72). More may be hoped from what has been called “competition between markets”; the relation between two railway-systems serving respectively two territories which compete against each other for the supply of a neutral market. In this case the interest of the railway is largely identified with that of its customers.

"To keep themselves in business they [the carriers] must keep producers in business in their territory, and keep the business of these producers up to a maximum volume."

Still, even in this case the railroads may wield the power of monopoly injuriously. It may be good tactics to favour a large firm; in the words of a railway official, "to give one hustler a special rate and let him scoop the business" (p. 71, and *cf.* p. 21).

From economic theories we turn to the decisions of tribunals: the principles of common law as interpreted by the courts, the various State and Federal statutes, and the ruling of the Interstate Commerce Commission. In his search for a standard of reasonableness, Mr. Clark examines an immense mass of American judgments and precedents; some of them familiar to students of Professor Ripley's valuable compilation of documents relating to *Railway Problems*, many of them less accessible to the English reader. The results of this elaborate review are thus summed up by the author:—

"The central [standard] is that of comparative cost; modified towards conservatism, especially in the courts, by consideration of established interests; slightly modified by the 'infant section' [perhaps a misprint for 'infant industry'] idea; and imperceptibly, if at all, by the standard of symmetrical development [as to which standard see pp. 127-8]; but modified most of all by necessary concession to the practices which must needs go with private competitive rate-making, especially that of making 'blanket rates' or others which 'just meet' competition over a wide area" (p. 135).

Mr. Clark applies his principles to the construction of an American distance-tariff not ineffectively. But his principal success consists not so much in the solution of practical problems, as in his clear statement of the issues and elucidation of the principles involved. He has done for the standard of reasonableness in railway rates something like what Sidgwick did for the standard of reasonableness in moral conduct. To have improved by philosophical criticism a department of political economy in which his countrymen already excelled is no slight achievement for a young author. Mr. Clark, inheriting a name distinguished in economic literature, has added to it new lustre.

F. Y. EDGEWORTH

The Conservation of Natural Resources in the United States. By C. R. VAN HISE. (New York: The Macmillan Co. Pp. 415.)

THIS book aims at bringing together in a moderate space the main facts as to available resources and rate of consumption of the principal minerals and forest products of the United States,

with some account of the principal sources of waste in present methods of extraction and use. The directions in which economics seem likely to be found are also dealt with, and numerous suggestions made for action by the State to prevent the too rapid consumption of irreplaceable commodities. The field covered is so wide that the author does not profess to have expert knowledge of all the problems, but hopes that the volume may be of use in enabling intelligent citizens to realise the importance of the subject. The book contains a number of photographs, statistical tables and charts. The author is a whole-hearted advocate of State action to prevent waste, but details and difficulties are hardly discussed. "Exportation of oil should be prohibited" (p. 359); "beehive ovens should be abolished" (p. 359), and so on.

C. F. BICKERDIKE

Political Economy: A Handbook of Economics and Public Finance for Egyptian Students. By JOHN TODD, B.L., Lecturer in the Khedivial School of Law, Cairo. (Edinburgh and Glasgow: Wm. Hodge & Co. 1910.)

MR. TODD'S preliminary remarks on the definition and method of the science of economics seem to us to incur a number of objections, as being inconsistent in themselves and ill-fitted to introduce the subject to the youth of Egypt. But he is not unsuccessful in the presentation of economic science to his students by the alternate handling of European and Egyptian problems. He is at his best as a practical economist, dealing not merely with motives but with economic data and economic relations. On the subject of free trade he is lucid and reasonable, explaining the subject for Egypt in a simple and convincing way. Incidentally, he reveals (p. 347) a fact not generally known, that in 1909 the Egyptian Government made the experiment of suspending the excise duty on cotton manufactures for a term of five years. As regards Egyptian interests, he is intelligently alert, and any reader may acquire from his work a good insight into the conditions of the cotton-producing industry, and the main aspects of international trade there.

On only one point of practical economic doctrine does Mr. Todd seem to the present reviewer to incur serious objection. It is his handling of the population question. He writes that the theory of Malthus "is as true as ever, but now it must be applied, not to any single country, but to the world as a whole," arguing

that since England no longer depends upon her own food supplies, the theory has lost its practical application. "Malthus could not foresee that, by the introduction of steamships, she would be able to draw her food supplies from the farthest parts of the world." Mr. Todd has misconceived the problem. Malthus actually saw foreign food imported into England, checked only by an import duty; and his position remained unchanged. To say, as Mr. Todd does, that the theory remains true, but that it has no practical application till "the whole area of the earth's surface is fully occupied by man," is only to reiterate the old fallacies of those who never grasped the theory at all. Even on the assumption that subsistence can be increased more easily for the people of any country by an exchange of their manufactures with other countries which have advantages for food production, the Malthusian law would still stand, that population, under "natural" conditions, *"tends to increase faster than subsistence."* What Mr. Todd should have told his students is that in many countries control of population is so far being approached that the birth-rate is much lower than formerly, and that *thus* the divergence between gross population and food-supply is lessened, and the loss of child-life through deficient means of subsistence is in process of reduction. But great divergence there still is; and even if that should disappear there will remain both the truth of the theory and the practical application in terms of the needed control.

In this connection Mr. Todd writes (p. 66) that the rate of increase in Egypt "has now probably passed its maximum, as there is a marked tendency among the upper classes to postpone the age of marriage and to abandon polygamy." The statement is interesting, but the suggestion that polygamy tends to a rapid increase of population is open to grave question. As his words imply, it is (as it must be) relatively much less common among the poor than among the rich at all times, and the birth-rate among the poor in Egypt is high, like the death-rate. Readers interested in Egypt will note Mr. Todd's statement that "the standard of living among the working classes is exceedingly low; indeed, the general conditions of life among the fellaheen are such as only the climate could make tolerable." His book, further, is honourably free from the normal racial boasting about the marvels wrought by the British control.

J. M. ROBERTSON

Das Englische Bankwesen. By EDGAR JAFFÉ. Second revised edition. (Leipzig: Dunckler & Humblot. Pp. 370.)

AMONGST all economical subjects, there are very few which have attracted so much the attention of students of political economy as the banking system of Great Britain. This can easily be explained by the important position occupied, as Clearing House of the nations, by the Bank of England, which weekly statements are the barometer for the international money market, the guide which enables international trade to form an opinion of the monetary situation, and by the great services which this institution, and other British banks, have rendered and continue to render to British trade.

But although many books have been published on English banking by students in England and abroad, no one has studied so carefully the organisation of the Bank of England, and its relation to the English and international money market, as Mr. Edgar Jaffé. His work, *Das Englische Bankwesen*, of which he publishes a second and revised edition, ought to be read and studied by everyone who takes an interest in the working of Great Britain's foremost banking institutions, and in the way an immense business is handled by these institutions and their branches, by those in Scotland and Ireland, and by the numerous Colonial and foreign banks established on the London market.

Besides, Mr. Jaffé gives useful information concerning the working of the bill brokers and stock brokers, the way the banks contribute to the development of trade and industry, the discount and gold policy, and the reserve held by the Bank of England. In a word, his book is full of interesting facts and worth reading, especially at a moment when the question of strengthening the gold reserves of the country, which was already discussed at the meetings of the Association of Chambers of Commerce in Cardiff and Leeds, and will be discussed again at the March meeting to be held in London, is coming more and more to the front.

C. ROZENRAAD

Life in an English Village. An Economic and Historical Survey of the Parish of Corsley, in Wiltshire. By M. F. DAVIES. (London: T. Fisher Unwin. 1909. Pp. xiii+319. Price 10s. 6d. net.)

THIS book appears to mark a new departure in sociological investigation, at any rate when we consider the scale upon which it has been carried out. Miss Davies's object has been to investi-

gate and describe in detail a single village and the life of its inhabitants. She has thus carried out an intensive application of the methods by which Mr. Booth and Mr. Rowntree investigated London and York. Indeed, she follows very closely those of the latter, and applies to the eight or nine hundred inhabitants of Corsley the tests and criteria which he utilised for the population of York. The work, which has been admirably done, is typical of the aims of modern sociology, which endeavours above all things to get knowledge, and seeks to know before it attempts to reform. Indeed, were it possible to apply this method to every other parish in England, and also to cover completely the more well-to-do classes, which circumstances have put beyond Miss Davies's power, we should be near possessing a complete inventory of the material conditions and resources of every family in the kingdom. In any case it is an immense advantage to possess this knowledge of a particular village.

To her task Miss Davies has brought many admirable qualifications. To a knowledge of, and sympathy with, the people, brought by twelve years' residence in the neighbourhood, she has added considerable acquaintance with urban conditions, a grasp of economic principles and of historical facts. This last has enabled her to deal effectively with the past history of Corsley in Part I. of her book. The parish, which is a peculiarly straggling one, is described in the opening chapter. Like so many other parts of agricultural England, Corsley was profoundly influenced by the Reformation, and perhaps the earliest important event in its history was the unification which it underwent at this time at the hands of a certain Sir John Thynne. It was afterwards to develop a flourishing cloth industry, of which Wiltshire had long been the centre; but this was only at a comparatively late date, as no traces of it can be found prior to the Civil Wars. The result of these, and of the consequent disturbance to trade, was that manufacturers transplanted some of their trade to the more peaceful country districts, and by this tendency Corsley profited. From 1760 to 1837 the parish underwent a rapid development, the population reaching a maximum of 1,621 in 1840, from which number it had sunk to 824 at the last census. In dealing with this period Miss Davies devotes separate chapters to Industry and Agriculture, the House of Commons, the Religious Revival, and the Old Poor Law. The decline of the nineteenth century was the result of the decay both of industry and agriculture. Lack of demand for female labour has been driving the younger women into the town, to be followed by the younger

men. A more favourable tendency has been that towards the system of small holdings—a reversion to older methods—to which the rich sandy soil is peculiarly appropriate.

But it is in the second portion of the book that its main interest and merit lies; and Miss Davies must be congratulated on her great capacity for obtaining information, as evidenced by the very extensive list of questions which were addressed to each household, as well as the numerous family budgets. First of all there is an analysis by trades, describing shortly the wages earned and the conditions obtaining in each; but the treatment of general industrial conditions, apart from wages and earnings, is not very full. A short chapter on Housing is next given, and then comes what is the best part of the book, an analysis of the population in relation to poverty. Here Mr. Rowntree's methods are closely followed and his tests are adopted. "An estimate has been made of the minimum cost at which food, fuel, dress, household sundries, and houseroom, sufficient for efficiency, can be obtained in the parish," and all families below this standard are placed in primary poverty. It may be added that Miss Davies omits rent, because nearly every cottage has a good garden whose produce sometimes more than equals the rent. As, however, nothing is allowed for clubs and insurance, which even the poorest labourers make, nor for waste arising from ignorance, no family can be regarded as securely above the line of primary poverty unless the income exceeds this by at least 1s. per head. This is secondary poverty; and out of 220 families, twenty-eight are in primary and thirty-seven in secondary poverty. This has been carefully analysed and its incidence upon different classes of labourers and artisans is discussed. The analysis of character in relation to poverty is extraordinarily good, and a table is given covering all the families in either form of poverty, with the remarks of school teachers and shopkeepers on this side of their lives. No less interesting is the extraordinarily detailed series of family budgets and dietaries, whose collection must have involved great tact as well as much labour. The remainder of the book includes chapters on Ancestry and Children, and one that is all too short on Social Life, and a concluding one.

The thoroughness and impartiality of the author are attested by her own statement that her conclusions were many of them "entirely at variance with the preconceived notions she had formed from twelve years' superficial acquaintance with the parish and its inhabitants." Corsley contrasts curiously with the general supposition that the labourers of Wilts are the worst paid and

most poverty-stricken in England, and Miss Davies expresses surprise at finding only one-eighth of the population in primary poverty. Possibly the first cause of this—the wide distribution of a rich soil—renders Corsley in some respects not a fair sample of rural conditions; but even so, the results are surprising. The second cause is the negative one of absence of children. On the other side have to be placed the facts that two-fifths of the children are in families in primary poverty, and only one-third above the line of secondary poverty, that the mortality returns show a huge wastage of human, and especially of child, life, and the evidence of insufficient nutrition of children in poorer homes. Miss Davies remarks on the curious difference between the mortality in the families of labourers and among the children of market-gardeners. Indeed, the unsatisfactory conditions of child life are the great blot on social conditions in Corsley. We need only repeat that Miss Davies has done a very fine piece of work, which might well be extended by other workers to sample villages in all the counties of England. The treatment of actual conditions to-day is, however, very decidedly better than the historical first part.

N. B. DEARLE

NOTES AND MEMORANDA

ECONOMIC TRANSITION IN INDIA.¹

WE all know that India is in a state of economic transition. All alike recognise it as a fact, whether they passionately regret it as the work of their Western rulers or whether they urge that the State is not doing all that it might to complete the process. But when we have labelled the present condition of India as "transitional," we have neither explained that condition nor precisely defined it. "Transition" is a wide term that covers many different degrees and rates of change. Again, it implies passage from one relatively permanent state to another; and we may well ask What are the relatively permanent states between which India is at present moving? And, besides this, What are the real causes and effects of this action which all agree is going forward with remarkable speed, and producing, whether for good or ill, remarkable results? These are questions which need determination if we would possess more than a superficial understanding of the political condition of India, which, like all other political situations both East and West, cannot be understood without a careful evaluation of economic factors. If, then, we would understand events which have been disquieting and tragic enough to fix general attention it is not enough merely to explode the false ideas of the late Mr. W. Digby or unravel the sophistries of the late Mr. R. C. Dutt. It is not enough to prove that India has progressed instead of being impoverished under British rule. That alone cannot explain why progress should have brought discontent. But we must consider in what the progress consists, how it is operating, and what are its immediate as well as its ultimate results. In short, we must understand what is meant by the well-worn saying that India is in a state of economic transition.

Rural and city India have been contrasted by many writers of late years; and, indeed, the contrast is plain enough to need

¹ Read at Section F of the British Association, 1910.

no rhetorical heightening. To speak broadly, rural India is primitive or mediæval; city India is modern. In many ways the conceptions of modern economists are as little applicable to Indian village communities as they would be to feudal Europe. On the surface you find primitive methods of agriculture. Not that these are in themselves evil. These primitive methods are the fruit of long experience. Only the other day we were being told that the Indian custom of ploughing in the hot months of April and May, and thus exposing the soil to the sun in its greatest strength, exactly coincided with the latest theories of scientific agriculture. But though these primitive methods may in themselves be good and wise, they are carried out either carelessly or wastefully. A better plough than theirs would expose much more soil to the fertilising sunshine. A more careful treatment of manure would do much to increase their crops. Indian agriculture is wasteful and primitive—as the agriculture of a mediæval manor was wasteful and primitive.

Then, again, the Indian village-community is still almost self-sufficing. Not many years ago it was entirely self-sufficing. The village grows its own food. It produces the leather that it needs for harness. The village smith makes the few simple tools that the villagers require. The village potter supplies them with vessels. In a good year the local grain dealer buys the surplus corn for export; but, apart from that and the purchase of a few Manchester cloths, the village has no need of economic dealings with the outside world. It is in itself an economic unit. Until very lately the villagers regarded their neighbours of the surrounding villages with as much suspicion as a mediæval freeman of Southampton felt towards a "foreigner" come from Bristol or even Winchester.

Again, the Indian cultivator, like the primitive cultivator, possesses little or no capital. For him oxen are still, as they were to the Greek or the Roman cultivator of early times, the only known form of capital. It is true that in various parts of India you will find rich landlords; but even they never invest capital in their land as an English landlord does. Government alone applies capital to agricultural land. As a rule, the same man occupies the land and labours on it, and himself owns the scanty capital that is needed for its tillage. The economic functions have not yet been differentiated or assumed by distinct social classes—another emphatic sign of primitive economics, which has its own consequence also. For an under-stock of capital means that a bad season is ruinous. Just as the Athenian cultivator in

the time of Solon, and the Roman cultivator of the early Republic, were always finding themselves in debt to the aristocracy for loans of cattle, so, too, the Indian cultivator is always in debt to the grain merchant. Just as the Greek and the Roman loans were accompanied by enormous interest, such as few or none were ever able to pay off, so, too, with the loans of the Indian corn dealer. Few escape who have once accepted his offers of accommodation; and few are so fortunate as never to require them. Since, then, seventy per cent. of the Indian population is agricultural, it follows that that percentage of Indian society is still organised after primitive models, and still occupies itself in primitive ways, as is shown by its agricultural methods, its lack of dealings with the outside world, its lack of capital, and its heavy indebtedness to a class other than its own.

But there is one feature of this rural society which does more to determine its position in economic evolution than any other. A money system has not even yet come into complete use. Until the establishment of British revenue methods, there was no special reason why money should be used at all. Taxes were largely paid in kind. The workpeople of the village, the blacksmith, the potter, the leather-worker, were (and are still in the villages) paid by a fixed quantity of grain at harvest-time. Yarn was spun and cloth woven by the women of the village. Money in those times was only a store of value, not a medium of exchange. When by some happy accident money did come into the villages, it was promptly converted into ornaments—many Indian vernaculars have special names for necklaces made of gold coins—or otherwise hoarded. Then came the regular system of collecting the revenue in cash. Just as in England the royal demands for money formed the most powerful cause of introducing a money economy into the rural districts, so, too, has it been in India. But even now the system is incomplete. In many places rents in kind are paid. And the village craftsmen still, in many places, receive their traditional shares of grain. It is clear, then, that rural India, in many most important features, corresponds to rural England of, say, the time of the early Plantagenets.

But city India is very different. In Bombay and Allahabad, in Calcutta and Cawnpore, in Madras and Delhi, in short, in all the larger cities, commerce is carried on according to modern methods, even though the imitation of the West is still crude and lacking in subtlety. There you will see the sandwichmen that you left in the London gutters. You will find the newspapers as full of advertisements as English journals are. The

descriptions are, indeed, drawn rather too obviously from the imagination. The Eastern advertiser has not yet acquired the psychological skill of the Western puff-men. But, nevertheless, here is advertisement, and where there is advertisement there is competition also. Indian merchants are as keen to buy cheap and sell dear as the keenest London tradesman.

Again, in these Indian cities you will find the joint-stock company. Many of these are floated and 'carried on' by Westerners. The jute companies are British, some large leather companies are English; but a considerable number of cotton companies are carried on by Indians with Indian capital. Large-scale production is very much on the increase. That and the increased imports are driving the old home-working artisan out of existence. Then, too, it is in the cities only that you can look to find any accumulation of capital; and that has gone on rapidly in the last generation in Indian cities. Indian banks are gradually being established, banks in the sense in which we use the word, limited-liability companies which rely for the chief part of the loans they make on the deposits entrusted to them; and this is quite a different matter from the older system of money-lending, where the money lent is the savings of the lender. Of course, long ago you could get native cheques—*hundis*—on any considerable Indian town. But these never represented deposits as our bank drafts largely do. It is one thing for money-lenders to form a system among themselves; but it is something quite different for the people to have sufficient confidence in Indian banks to deposit their money in them; and this growth of Indian credit, slow and hesitating as it has been, is but another sign to show that the Indian city is attempting to organise its industry and commerce more or less after the manner of the West.

But this is not all. Besides the limited companies, besides the accumulation of capital, besides the establishment of a real banking system, we have Indian factories as well, that, in spite of certain differences, are identical in essence with Western factories. In them hundreds of workpeople are gathered together, tending loom and spindle as in the West; in some cases working long hours, as in the West before the factories were placed under regulation; and even becoming daily conscious that they have class interests of their own apart from their ancient castes and sects. Only a few months ago the factory-hands of Bombay held a meeting, and talked of their grievances, and passed resolutions in favour of the proposed new Factory Act, very much as Western workmen might have done. Let us not exaggerate the signi-

ficance of this isolated meeting; but it is hard not to see in the causes that produced it something very similar to the causes that were at the bottom of English trade unionism. And to foster and extend the industrial movement out of which these factories have arisen, we have a loud and persistent demand for technical education. At a recent sitting of the Imperial Legislative Council, strong resolutions were brought forward concerning the establishment of a technological institute which should train young Indians to the direction of industry. Every year Government sends home promising students to go through courses of technical education in our newer universities and in the workshops themselves. There are signs that young and educated Indians are becoming much less unwilling to engage in manufacture; and the science classes of Indian Universities are always besieged by youths desirous to find a seat in them. The demand for technical education is becoming as eager as it is in the West; and nothing could show more plainly the extent to which Western ideas of industry and commerce have penetrated into the life of the larger Indian cities.

These are all common and familiar facts, both as regards rural and city India. But they are so familiar as often to be forgotten. Yet they deserve to be borne in mind—that is my only excuse for stating them once more—because it is surely a unique fact in economic history that they should thus exist side by side. The present condition of India does not correspond with any period of European economic history. It is almost as though we had taken three hundred mediæval men and a hundred modern men, multiplied them by a million, and set them down together in society. Of course, in all periods we find old and new elements, the advanced and the backward, existing side by side. In mediæval Europe the towns developed a money economy long before the country adopted it. In modern Europe the rural inhabitants have remained under the influence of old-fashioned ideas long after these ideas have disappeared from among the town-dwellers. But at no period in Europe has the population as a whole cherished ideas altogether disparate. The peasant has rarely been as backward as to be incapable of transplantation into the city. The distance between villager and townsman has always been measurable, for our own economic growth has always been a spontaneous evolution. Whether it has been fast or slow, change has been due to causes working from within, not to influences operating from without. But that is not so in India. There change has been accomplished by external influences and

their results, by way of imitating foreign methods and, in a less degree, of reacting against them. The consequence has been that India is divided between extremely different ideas. The pioneers of European progress have always cherished ideas which their less advanced companions were certain to reach within a comparatively short time, for their advanced ideas were but the development of ideas that were common to all. European progress in the economic world has thus been evolutionary; but this economic transition in India is revolutionary.

We are brought to the same conclusion if we compare, not only the diverse economic types displayed by rural and city India, but also the incompatible elements to be found in each of the two considered separately. Anyone who knows rural India knows it to be organised in a very primitive economic fashion. Some of its more primitive features have already been alluded to. But then it is not consistently primitive. The Indian villager is brought into contact with things that he would naturally never have heard of, and he does things that he would naturally never have dreamed of doing. For instance, there are the Indian railways. In England the linking up of town and country was a gradual process which occupied, at the very least, a century and a half. The English country-folks only approached the railway by the easy stages of the wagon and the mail coach. But the railways descended on India without nearly so much preparation. Nothing could have struck more forcibly at the self-contained, self-sufficing character of the old Indian village. With the railway ready to carry their surplus produce away to distant markets, the villagers' grain-dealing is modified at once. They are brought under the influence of competitive prices. Should the price of grain rise, they will certainly begrudge the customary shares which they still give to the blacksmith and the potter. It is much as though the English railways had been built in the thirteenth instead of the nineteenth century.

But this is not all. Railways not only carry off surplus grain, but bring and distribute imported goods. Manchester cloths tend to replace home-woven cloths. The villagers can purchase better knives than their local craftsman can make them. That is to say, home industries and local industries are attacked; only, instead of the process being long and gradual, in India it is swift and unprepared for. Men thus lose their occupation in a community that is not organised on competitive principles; the needs of life are imperative; and so competition is introduced almost on a sudden into a unit that for long centuries has followed cus-

tomary practices. The change is identical with that which England, and, indeed, all Europe has undergone; in the West its effects were less felt because they were spread over a considerable time, and because causes had long been at work slowly loosening and weakening the rural communities; but in Indian villages custom and competition are being suddenly brought together.

The Indian village community is really unprepared for any such invasion by the outside world. It is being revolutionised. Railways, as we have seen, are carrying away its surplus produce and are bringing in foreign goods. But they are also carrying away members of the community itself. There has been a demand for Indian labour in the Indian factories, in the plantations of Ceylon and the Straits, in Africa, the West Indies and Demarara. Emigration has grown up, and though the number of emigrants is trifling compared with the three hundred millions of rural population, it is necessarily acting as another solvent of the village community. In some parts of Madras, where emigration has been comparatively easy, it has quite upset the customary organisation of things. It has acted in the same way as the Black Death of the fourteenth century. It has set cultivators demanding easier terms of their landlords. It has compelled the payment of more than customary wages. In Western countries the fluidity of the population, however, has been a slow development. It has only been disturbed by a few terrible catastrophies such as the Black Death. But this Indian development is sudden. The villager who was brought up to follow immemorial custom is himself forced into following the methods of competition. The passage from the primitive to the modern is compressed into a single generation, instead of being distributed over many generations.

Rural India, then, though chiefly characterised by primitive usage, has been invaded by ideas that are intensely hostile to the old state of things. It is primitive, but not consistently primitive. Competition wages are paid side by side with customary wages. Prices are sometimes fixed by custom, but sometimes, too, by free economic causes. From the midst of a population deeply rooted in the soil, men are being carried away by the desire of better wages. In short, economic motives have suddenly and partially intruded themselves in the realm of primitive morality. And if we turn to city India we see a similar, though inverted, state of things. Just as in rural India primitive organisation has not been able to maintain itself in a state of purity, so,

too, in city India modern organisation has not been able to impose itself in a state of purity. In the former the old ideas are mixed with new and hostile ideas; in the latter, the new are mixed with old and hostile ideas. In neither case has the mixture been harmonious or the fusion complete. Indeed, the two orders are too far apart, too unrelated, to coalesce with ease. Modern industry and commerce cannot be established and carried on in the East with the thoroughness of the West. The Indian cities contain large accumulations of Indian capital, but this is not nearly large enough to finance Indian trade. Though the security of British rule is encouraging Indians, not only to save, but also to employ their wealth in something more advantageous than the purchase of jewellery, yet Indian resources are entirely insufficient. Capital is scarce in India. It earns more than it does in the highly capitalised countries of Europe. A constant stream of British capital is, therefore, pouring into India, and British capitalists are to modern India very much what the Jews, and then the Lombards, were to mediæval England. There is no doubt that the spirit of industrial enterprise is spreading in India; but it is equally certain that indigenous capital is not forthcoming for its assistance.

Absence of native capital is one certain sign of economic backwardness. But there are others which show the same thing in a more forcible way. For instance, you will find Indian limited companies, but the caste system still offers a strong resistance to economic progress. The Brahmin's intelligence is, beyond doubt, keen enough, but if he were to engage in manufacture he would find himself seriously hampered by caste regulations. He can acquire no practical knowledge, for instance, of the tanning industry, for he must not touch the skin of the sacred cow. Besides this and similar limitations, his inherited tendencies were decidedly opposed to his acquiring practical experience of any industry. His hands, and those of his ancestors for many, many generations, have used no instrument besides the pen or the stylus. The industrial castes, the weavers, the blacksmiths, the leather-workers, the brass-workers, have been depressed for an equally long time to the position of mere craftsmen. They may acquire extraordinary skill with their tools, but they have no aptitude for organisation. So industrial leaders are few. In spite of the cry for technical education, and in spite of the well-marked industrial movement, the fact remains that Government service is the most attractive employment for educated Indians, who ought to be engaging in commerce and industry. A curious

illustration of this attachment to Government service was afforded the other day by a petition of the Madras fishermen. After reciting the services their ancestors rendered to the English against the French in the eighteenth century, the petitioners go on to pray that Government will grant them special educational facilities—not, as one would have expected, because they desire to raise the mental level of their community, but because they wish their children to be able to qualify for admission to the recently established fishery bureau.

Again, we have factories in the larger Indian cities, but their population, though employed in spinning mills and shops, and doing the same duties as Western hands, nevertheless has habits that would much astonish the latter. For instance, there is no permanent factory population. As the Report of the Factory Commission, 1908, observes, the Indian factory-hand is primarily an agriculturist. His real home is in his native village, not in the city where he works. He leaves both wife and children behind him when he emigrates to the factory, and regularly returns to them to look after his family affairs, and to rest from his labours. The Bombay hand generally spends at least a month of the year in his native village. The jute operatives in Calcutta, who work longer hours and earn higher wages, go back to their home for at least twice as long a holiday. More than this, the factory-hand can always find work in his village if he gets tired of the factory. Consequently he is both independent and unskilled to a degree that is difficult to realise in England. Since he is unburdened with wife and child he easily moves from place to place. The Factory Commission found men who had wandered from mill to mill over almost the whole of India; and in many places the whole staff of operatives is said to be renewed annually. In the factory itself the hand works as he feels inclined. He is said to take his food during work hours and to reserve the midday break for sleep. In Indian textile mills, we are told, the average man is absent from his work for about two hours a day. The consequence is that ten to fifteen per cent. have to be engaged more than are really required to run the machinery. And to crown the situation, the ordinary operative is imperfectly sensible to economic motive. The standard of living is low. The workman's needs are few, and they expand very slowly. An increase of wages may at first have the extraordinary result of diminishing the supply of labour, for the workers, being able to save more in a shorter time, go home for longer periods.

In city India, then, as in rural India, there is the sharp antagonism between the old ways and the new. There is the demand for capital, but its local supply is quite inadequate. There is the demand for technical education, but educated Indians still prefer a clerkship under Government to industrial occupations. There is the extension of manufactures, but it is hampered by the system of caste. There is the factory system, but the Indian operative is governed much more by primitive than economic motives. We have seen that in India itself the cities are economically far removed from the country districts; and when we look at things a little more closely, we see that this unnatural union of ideas, so far removed from each other as to be antagonistic, is to be found, not only roughly in the differences between the townsmen and the villagers, but also in a much more intimate and subtle manner alike in the country districts and in the cities. The opposition and contrast between town and country is repeated by contrasted elements lying side by side in both town and country.

It does not need great discrimination to observe that the elements are extraordinarily diverse. As has been said, they are more diverse than any economic elements which ever existed side by side in Europe. At any time in Europe the advanced economic section had grown out of the unadvanced section. But in India of to-day we find co-existing economic ideas which, at all events in European history, are separated by thirty generations. The old customary and caste organisation actually exists by the side of the new competitive organisation; and they operate not only on different individuals in the same country, but also on the same individuals. The same disparity which is to be seen between the agricultural and industrial classes is also to be seen in the individuals of each class. They are, to borrow the words of Matthew Arnold,

Between two worlds—one dead,
The other powerless to be born.

India, then, is in a state of economic revolution throughout all the classes of an enormous and complex society. If we would compare the phenomenon with anything known to us in European history, the comparison can only be with some period when change was much more rapid than it has generally been, for evolution tends to become revolution as its speed is accelerated. The only period in which Europe offered even faint analogies to modern India was assuredly that which we generally describe by the name of the Industrial Revolution, from which even now we

have not settled down into comparative stability. That was a period of great changes. Machinery was invented. Steam was definitely applied to transport and manufacture. Large-scale production was introduced. The factory system was organised. The cottage industries were destroyed. The economic organisation of Europe, in, say, 1850, was assuredly a very different thing from what it was a century before. We may reckon it as a fortunate circumstance for Europe that the intellectual movement which culminated in the French Revolution did not coincide with this Industrial Revolution. If it had, it is possible that European society might have been hopelessly wrecked. But, as it was, even when the French Revolution had spent its force in the conquests of Napoleon, the Industrial Revolution stirred up enough social and political discontent. When whole classes of people are obliged by economic revolution to change their mode of life, it is inevitable that many should suffer. Discontent is roused. Political and destructive movements are certain to ensue. Not only the revolutions of '48, but also the birth of the Socialist party sprang from the Industrial Revolution.

But that revolution was not nearly so sweeping as that which is in operation in India now. Steamships and railways were prodigious factors of change in Europe; but then they were introduced by regular lines of shipping carrying a great volume of foreign trade, and by high roads and canals, such as India never knew. Again, the men gathered together in English factories were not by descent agriculturists. They were already used to unremitting labour. The weavers and spinners had been weavers and spinners before ever they entered the factory gates. And, finally, the invention of machinery and steam-power was but the crowning event of a long series of years in which commerce and industry had been constantly expanding, in which capital had been largely accumulated, in which economic principles had been gradually spreading. Adam Smith wrote when the Industrial Revolution was in its very infancy, and he still remains our greatest economist; but what rank would he have held now had he applied his genius to the study of Indian economics a couple of generations ago? No, the Indian economic revolution is vastly greater and more fundamental than our Industrial Revolution, great as that was. Railroads have been built through districts where travel was almost impossible, and even roads were unknown. Factories have been built, and filled by men unused to industrial labour. Capital has been poured into the country which was unprepared for any such

development. And what are the consequences? * Indian social organisation is being dissolved. The Brahmins are no longer priests. The ryot is no longer bound to the soil. The *bania* is no longer the sole purveyor of capital. The hand-weaver is threatened with extinction, and the brass-worker can no longer ply his craft. Think of the dislocation which this sudden change has brought about, of the many who can no longer follow their ancestral avocation, of the commotion which a less profound change produced in Europe, and you will understand what is the chief motive power of the political unrest. It is small wonder. The wonder is that the unrest has been no greater than it is. Had India not been an Asiatic country she would have been in fierce revolution long ago. Had such a change occurred under the later rule of native princes, India would have been a seething chaos to-day. It is not the fault of British rule, except in so far as British rule has tended to accelerate the change.

What India seems to require more than anything else is a little leisure to digest the new methods, but it is doubtful whether she will be able to obtain it. Government is harassed by the extremists on the one hand, who would like to throw everything into confusion, and by the moderates on the other, who cry out for more and more economic reform. Between the two, India is not likely to get what she most needs—a little rest after these exhausting changes. But still there is this to be said—the more the economic revolution is hurried on, the sooner it will be over. Of course, in that case, we must expect the political writhings to become more and more violent. But once they are over, we may expect the situation to soften down to a more balanced condition. India in that case will have had the advantage of skipping a development which has cost our race no less than six centuries of effort; but he would be a bold prophet who would venture to foretell how soon she will be able to enter into her rest.

HENRY DODWELL

FRENCH RAILWAY SERVANTS AND THEIR PENSIONS.

FOR several months an agitation has been going on among railway servants in France, conducted by the leaders of their trade union, but confined to a minority of the *personnel*. The Government has shown itself to some extent favourable to the movement. And yet, if the latter were to succeed, the result would appear in a fresh burden on the Exchequer. It should be

remembered that there is a close interdependence between the finances of French railway companies and those of the State.

The demands influencing the agitation are the more surprising in that, quite recently, Parliament took upon itself to impose a considerable improvement in the conditions on which the Companies have granted pensions to their servants. It will therefore be relevant to show how and why Parliament has intervened to compel the Companies to treat their employees with more generosity. On their side the Companies have just opened a lawsuit before the supreme French tribunal, the Conseil d'État, claiming that the State has broken its contracts with them, and should therefore release them from the burden recently imposed upon them.

We may briefly recall the fact that, in France, the railways have been conceded to private enterprise (except the recent State-managed lines) by specific contracts, and these are accompanied by documented conditions, fixing explicitly the terms of the *bilateral* contract. Every obligation of the company is clearly specified. No alteration can be made in the list of conditions and in the obligations, save with the consent of the contracting parties. And it is in virtue of these "conventions" that the Companies have to hand over, on a fixed date, all their service, their plant, their rails, etc., to the State.

Hitherto Parliament had never ventured to ignore the bilateral character of these contracts, which bore the signatures of the representatives of both State and Companies. And it is a fact that in 1890 a law had been passed solely with a view to hinder the railway companies, financially allied as they are with the State, from being too generous to their employees. This may seem a paradox in view of to-day's events, and yet it is absolutely true. The Companies had considerably developed their pension funds. This might react on their net receipts. And the State, being compelled to cover their deficit to a certain extent, or to share in their profits (in certain cases in virtue of the conventions), had decreed, by the Act of 1890, that the Minister of Public Works should possess the power of veto with respect to the Companies' pension rules. The aim of this was, of course, to safeguard the State funds.

This proves that all the relations between the State and the Companies are regulated by express bilateral contract. And the lawsuit has been instituted by the Companies to enforce respect for this contract or to be accorded compensation. Besides, the Minister of Public Works, who has led the legal attack on the

contract in both Chambers—M. Barthou, once a Moderate, now a Socialist—has claimed to justify this attack on a *bilateral* contract by merely citing a precedent intervention, equally monstrous and abusive. We mean the Act compelling mining companies to give pensions to their employees in certain circumstances. M. Barthou, in a word, has said that the State, being party to a contract, may alter it on its own authority. On the other hand, it was declared by Parliament in 1890, that “no obligations might be imposed upon the Companies beyond those provided for by the contract of concession.”

These Conventions have only anticipated the one case of State intervention, arising largely from a very liberal interpretation of terms, namely, *security of exploitation*. It was foreseen that the State might impose on undertakings everything indispensable to insure this security. And for some time past the Administration, to win the approval of Parliament, as well as of the agitators among the railway *personnel*, has largely intervened in regulating, and especially in limiting, the hours of labour. The pretext given was that the Companies required of the employees periods of service too long to enable them to be fit to carry out their tasks with safety. Here arises the question of security mentioned above. Regulations in great detail were drawn up to insure periods of rest, especially for drivers and firemen, to limit the length of a working day without intervals. A numerous administrative staff, the servants of the Ministry of Public Works (who are the controllers of labour) saw to it that the employees were not overworked, and that the regulations were carried out. It was even decided by the Ministry that, in the working day of a driver and a fireman an hour and a half should be allowed before every departure to put the engine into a proper condition. This, it must be remembered, is the task of special workers, who carry it out under the driver's supervision. The “Inspection of Railway Workmen's Labour” decided that they were not to work more than ten hours a day. As to that, the Companies had forestalled the decision by putting the limit well below ten hours. And of these ten hours, the drivers and firemen, at least on passenger trains, do not spend five on the engine.

This clause relating to security has been the pretext for the present demand for alteration and unification in the conditions for giving pensions. Of course, the amount of the pension has nothing to do with the employee's safety during his work. The new conditions for pensions have been extended to include workshop hands, such as painters, and officials who have no influence

whatever on "security of exploitation," such as booking-clerks. Another series of facts proves that the servants of the Companies were not formerly exposed to excessive fatigue, and that the relative delay in touching their pensions was no menace to the famous "security of exploitation," the pensioners all living to a great age. Out of 795 drivers who in 10 years received pensions at the hands of a certain Company, 540 were alive after 10 years; and of these 187 were over 65, and 70 were over 70. Speaking generally, such servants as were exposed to great fatigue—drivers, firemen and the like—were able, before ever Parliament intervened, to draw a pension at 55 years of age, after 25 years' service. And the pension was no meagre one. It might amount to three-quarters of their wages, if they had served longer than the minimum period required. Firemen of 55 years of age, who had served 33 years, might receive a pension of 3,300 francs. The pension given usually varied from 2,000 to 2,500 francs, and that is a good deal more than the French Government usually gives to its own servants. In fact, it should be remembered that the State, which professes to enforce liberal measures on private enterprise, at their expense, does not grant pensions to its own ordinary officials till they reach 60 years of age after 30 years of service!

Nor must it be forgotten that it was on their own initiative, many years ago, that the Companies instituted pension funds, thereby incurring pecuniary sacrifices which the State, in 1890, was inclined to think excessive. The Ouest Company set the example in 1851, and by 1856 all the other Companies were imitating it. At that time the Companies gave their servants facilities to deposit from 3 to 4 per cent. of their wages in a savings bank, engaging to add to each account double the amount deposited. It is obvious that this represented a considerable addition to salaries, and was an expensive matter for the Companies. Very soon the employees asked and obtained that these deposits and this formation of a pension should be obligatory on each servant, but largely at the expense of his employers. In consequence the Companies undertook to arrange a pension of a certain amount to every servant or official. They did not lose sight of the fact that changes in the rate of interest and in the value of the investments might entail a certain amount of uncertainty in the importance of the amount available each year for securing the future distribution of these different pensions. But they undertook the entire responsibility of this uncertainty in guaranteeing the payment of everything necessary for demands and

promises. From that time the railway servants became entitled to pensions amounting generally to the half of the wage received during the last years of service. It was, moreover, specified that the widow and children under age should have the reversion of one half of the pension. Once more, the employees were entitled to a proportionate pension even if they had not completed the normal period of service, or even after only 15 years of service, if illness or accident rendered them unfit for further service.

This is the situation, so advantageous and so superior to that of State employees, which French politicians have set themselves to alter for the benefit of railways servants—to alter, moreover, by compelling the Companies to increase the sacrifices which they had made on their own initiative, without being in any way bound to do so by their contracts with the State.

It is a considerable addition to their expenditure that they are required to make. The national budget will bear, and indeed already does bear, a good portion of it. The net returns of the Companies are slender enough to force them to demand from the State and the Exchequer grants corresponding to what is called the guarantee of interest. But this intervention and increase in public expenditure will prevent net receipts from rising to the extent that might have been looked for. So, too, the dividends of shareholders in the Companies would have increased, in virtue of those conventions of which we have spoken. Hence, important sums have been taken from the pockets of shareholders to be distributed among the servants of the Companies, whether this is done by lowering the age entitling to a pension, or whether the pension is increased. And there is no doubt as to the importance of the amounts involved. On the Nord railway alone, for instance, in 1909, the additional expenditure due to this legislative interference was upwards of 888,000 francs, measuring from the time when the new Act took effect.

About fourteen years ago certain politicians (their constituents being largely composed of railway servants) tried to persuade Parliament to legislate to the advantage of those constituents at the expense of the Companies and the Exchequer. From the outset, the pretext was, of course, that such legislation was a question of "security." And on that occasion they had not feared so to expand the proposed intervention, that, when fully applied, it would have involved an outlay of nearly one hundred million francs. This extravagant proposal, however, was not passed. Nevertheless, the extra burden incurred by the new measure

will not amount to less than $27\frac{1}{2}$ millions. And the Bill has this other inconvenient feature:—It will demonstrate to the employed that an Act is all that is needed to compel the employers to alter to-day pensions and pensioning conditions, and to-morrow, the rate of wages.

Henceforth, drivers and stokers can claim a pension at 50 years of age—surely an early start! All other train officials, as well as all other officials on active service, can claim their pension at 55. It is only the fear of financial complications that has induced Government to ask Parliament not to adopt the 50 years limit for all railway servants. And thus all those employed in railway workshops, or the safety of whose work age can have no influence (such as the painters of railway cars, etc., of whom we were speaking), can take out their pension at 55 years of age. The clerks have proved less interesting material. They are less numerous and less formidable as electors. They cannot touch their pension till they are 60, this being a scantier generosity than they were often shown by the Companies. They have been legally penalised, precisely that there might be more to bestow on the mass of labourers, properly so called.

At one time a clause had actually been introduced into the Bill, forbidding the refusal of a pension, either proportionate or full (according to age), in cases of dismissal for embezzlement, insubordination or conviction under common law. This iniquitous feature was eliminated, though there were many members of Parliament to mourn its loss.

The extra pecuniary burden arising from this Act is chiefly, of course, due to the lowered age-limit for the great majority of pensioners. But besides this the rate of pension has been sensibly increased. This rate has been always fixed, for all the Companies, at the figure determined by the richest and most generous among them. Thus, when the wages were 2,400 francs per annum, at 45 years of age, after 20 years' service, the pension was fixed at 960 francs. This pension, it should be added, was not paid till the normal age limit was reached, when admission to a pension was not due to any infirmity. But the latter needed not to have arisen in connection with the exercise of duty. For this same salary of 2,400 francs, the employee would, at 55 years after 30 years' service, earn a pension of 1,440 francs; at 60 years, after 35 years' work, 1,680 francs. This is better than the pensions bestowed by the State on its own employees. Hence Parliament has created a privileged class out of railway servants, especially drivers and stokers, not to mention the great majority

of the rest. We can imagine what a clamour will arise for other Acts creating other such privileged orders!—especially if the contributions by the servants themselves are not to be raised, and if the Companies are to guarantee the pension funds!

The privileged parties themselves are not satisfied with this Act passed in their favour. And while the servants of the little secondary railway Companies are demanding to be treated similarly to the servants of the great Companies, and to be granted equally good pensions, even the servants of the great Companies are seeking new favours, notably increases of wages. Their idea is that the new pension measures should take effect retrospectively. They want the increase to be valid at once for those who are already pensioned.

Such a result was only to be expected. Appetites have been tickled, and this violation of contracts regularly signed has done nothing to pacify minds.

DANIEL BELLET

September, 1910.

GERMAN FACTORY HANDS.

AN INQUIRY INTO THEIR INDUSTRIAL CONDITION.

IN the current number of the *Reichs-Arbeitsblatt* (the journal of the German Labour Department) appears the result of an exhaustive inquiry, conducted by the German Verband der Fabrik-arbeiter in August, 1907, into the rates of pay and conditions of work obtaining among its members. These comprise a great variety of workers, in the main unskilled, for whom no special trade union exists, because, as a rule, the branch of industry concerned is not of sufficient importance to warrant the formation of a separate union.

Among the numerous industries represented in the Verband we find industries so diverse as the chemical, the india rubber, the linoleum, the paper, the sugar, the cement, the soap, the chocolate, the brick-making, the cement and lime, and many others. Some of these, such as the chemical, are carried on chiefly by large firms in large towns. Others are more in the hands of smaller firms, and are more widely distributed over different parts of the Empire.

Notwithstanding this great diversity of occupation, the majority of the members of the Verband have this in common—

that they represent in the main the same type of unskilled factory hand. Their social status is practically uniform throughout the empire. One is, consequently, justified in treating them as a more or less homogeneous class for statistical purposes, and in drawing certain general conclusions from the results of inquiries addressed broadcast to them all.

For the purposes of its investigations the Verband sent out no fewer than 140,000 inquiry forms. Of these 81,140 were returned filled in. Of these, however, about 2,000 could not, for various reasons, be utilised. There accordingly remained available for statistical purposes 79,140 forms, of which 73,098 were sent by male and only 6,052 by female workers. At the time of the inquiry the Verband contained 134,357 members, so that in the event the mass of information available represented answers from 58.64 per cent. of the members.

The following table summarises the result of the inquiry as regards hours of work.

Hours of work.	Number of employees		Percentage of employees.	
	Male.	Female.	Male.	Female.
8	779	22	1.0	0.1
8½	390	41	0.5	0.7
9	4,662	677	6.4	11.2
9½	8,834	877	12.1	14.4
10	47,926	3,746	65.6	62.0
10½	3,276	327	4.5	5.4
11	4,342	329	6.0	5.4
11½	412	13	0.6	0.2
12	1,784	11	2.4	0.2
Over 12	683	6	0.9	0.1

From this table it will be seen that only 20 per cent. of the male hands, and about 27 per cent. of the female, work *less* than 10 hours per day, whereas 14.4 per cent. of the males and 11.3 of the females work *more* than that period. The average for all members would seem to be a trifle *under* 10 hours, viz., 9.77 hours for the males and 9.80 for the females.

The following table shows the methods of payment in vogue.

How paid.	No. of men.	No. of women.
By the hour	43,443	2,422
" day	4,563	599
" week	7,548	657
" month	54	—
By piecework	17,480	2,374

According to these figures 60 per cent. of the males and 40 per cent. of the females were paid by the hour, and 24 per cent. of the males and 40 per cent. of the females by piecework. If the returns from the female hands are to be taken as representative, it is evident that piecework is much commoner among the women than among the men.

In dealing with the weekly payments, the normal working period has alone been taken into account, and overtime has been ignored. Fractions of a mark under 50 pfennigs have likewise been disregarded; anything over that amount has been reckoned as a full mark. The following table summarises the result of the inquiry as to the rates of weekly wages ruling.

WEEKLY WAGES.

Men.		Women.	
Amount.	Earned by	Amount.	Earned by.
Up to 10 m.	192	Up to 5 m.	20
" 11	147	" 6	32
" 12	482	" 7	126
" 13	169	" 8	365
" 14	898	" 9	777
" 15	2,077	" 10	1,012
" 16	2,385	" 11	845
" 17	3,153	" 12	1,191
" 18	7,237	" 13	464
" 19	4,796	" 14	355
" 20	6,723	" 15	400
" 21	7,106	" 16	141
" 22	5,632	" 17	162
" 23	5,253	" 18	96
" 24	5,528	" 19	30
" 25	4,322	" 20	20
" 26	2,858	Over 20	16
" 27	3,695		
" 28	1,800		
" 29	850		
" 30	2,822		
" 31	352		
" 32	702		
" 33	475		
" 34	223		
" 35	381		
Over 35	530		

Taking the male workers, it is to be noted that those earning up to 11 marks a week are almost exclusively youths of from sixteen to eighteen years, or disabled workmen. On the other hand, among those earning 12 marks and a little over are to be found an appreciable number of adult workers. Roughly, 24 per cent. earn up to 18 marks per week, and roughly 26 per cent. earn more than 24 marks. About half draw between 19

and 24 marks. Only 3.6 per cent. earn over 30 marks, and less than 1 per cent. more than 35 marks. The following table summarises the results in another form.

Men.		Women.	
Weekly earnings.	Percentage earning same.	Weekly earnings.	Percentage earning same.
Up to 12 m. ...	1.12	Up to 8 m. ...	8.92
12 „ 15 ...	4.71	8 „ 10 ...	29.50
15 „ 18 ...	17.49	10 „ 12 ...	33.80
18 „ 21 ...	25.49	12 „ 15 ...	20.17
21 „ 25 ...	31.12	Over 15 ...	7.61
25 „ 30 ...	16.40		
30 „ 35 ...	2.95		
Over 35 ...	0.72		

The average weekly earnings for all male workers work out at 22.08 marks; 56 per cent. earn less than this.

The average weekly earnings for all female workers work out at nearly half that of the men, viz., 11.54 marks; 52.5 per cent. earn even less than this. Only 28 per cent. earn more than 12 marks.

The wide differences between rates of pay in different parts of the Empire is very noticeable. The average weekly wage is as low as 11 marks 40 pfennigs at Friedland, in Silesia, and as high as 31 marks at Oberhausen, in Rheinland. For Sachsen-Meiningen and Silesia the averages are a trifle under 17½ marks. The average for Berlin is 25 marks 70 pfennigs; for Hamburg, 25 marks 30 pfennigs; for the Rheinland, 25 marks 29 pfennigs; for Alsace-Lorraine, 23 marks 74 pfennigs.

The returns show clearly that, as a rule, wages are higher in the large towns than in the small; while, for example, in towns of less than 10,000 inhabitants 60 per cent. of the workers belong to the three lowest wage-classes, and only 5 per cent. to the highest, in towns of over 100,000 inhabitants only 10 per cent. are to be found in the three lowest, and no less than 20 per cent. in the highest wage-class.

Similarly, as is well known, the hours of work are shown to

Average length of working day.	In towns with population			
	Up to 10,000	10,000 to 50,000	50,000 to 100,000	Over 100,000
Under 10 hours ...	55	25	13	20
10 to 11 „ ...	177	85	11	11
11 „ 12 „ ...	20	7	—	—
Over 12 „ ...	3	—	—	—

be shorter in the big towns than in the small towns. This is well shown by the following table.

These figures show that in only 20 per cent. of the places with less than 10,000 inhabitants was the average working day *less than 10 hours*, while in 10 per cent. of such places it was *more than 11 hours*. Of places with more than 100,000 inhabitants, on the other hand, about 65 per cent. have a working day of less than 10 hours, and in not a single one do the men work for more than 11 hours.

The following figures show the average duration of the working day in different parts of the Empire.

	Hours.		Hours.
Berlin	9·35	Posen	10·12
Württemberg	9·86	Hesse	10·13
Hamburg	9·88	Brandenburg	10·15
Hanover	9·90	Rhineland	10·16
Brunswick... .. .	9·93	Silesia	10·16
Bavaria	10·01	Pomerania	10·22
Westphalia	10·03	Reuss	10·44
Baden	10·06	E. Prussia	10·46
Saxony	10·10	W. Prussia	10·95

The average for West Prussia would, accordingly, appear to be over $1\frac{1}{2}$ hours longer than that for Berlin.

Of great interest are some of the returns showing the relationship between ages and wages, wages and hours of work, &c.

The relationship between ages and wages is well brought out by the subjoined table, which relates to male workers only :—

Age.	Number of employees.	Average weekly wage.
16—18	1,850	16·85 m.
18—21	6,287	20·02
21—30	24,103	21·55
30—40	22,333	22·18
40—50	12,675	21·29
50—60	4,889	19·86
60—70	918	19·02
Over 70	33	16·25

It will be observed that the rate of pay rises regularly up to the fourth age-class, and then just as regularly diminishes with succeeding age-classes. Those between 40 and 50 would seem to earn less even than those between 21 and 30. Still more striking are the following figures, showing the connection between wages and working hours.

Working hours per diem.	Number of employees.	Average weekly earnings.	Average hourly earnings.
8	779	26·75 m.	55·79 pf.
8½	890	26·46	51·90
9	4,662	24·68	45·70
9½	8,834	24·34	42·70
10	47,926	21·92	36·50
10½	3,276	20·79	33·00
11	4,342	20·46	31·00
11½	412	19·67	28·50
12	1,784	19·73	27·40
Over 12	693	20·21	26·31

Nothing could demonstrate more clearly how the wages vary in inverse ratio with the length of the working day.

One of the questions on the inquiry forms was directed to ascertain the amount paid for rent by each worker. The answers to this question make it clear that the worst-paid hands have to pay relatively the highest rents, the disproportion being greatest in towns of between 50,000 and 100,000 inhabitants. The following table summarises the result of this part of the inquiry:—

Average yearly income in marks.	Percentage spent on rent in			
	Towns of less than 10,000 inhabitants.	Towns of between 10,000 and 50,000 inhabitants	Towns of between 50,000 & 100,000 inhabitants.	Towns of more than 100,000 inhabitants.
549½	15·56	13·00	26·40	24·20
723½	12·35	13·71	18·50	16·91
869	11·24	13·26	15·91	18·25
1,006	11·00	12·47	15·59	17·87
1,173	10·93	11·64	15·09	17·97
1,388	9·33	11·18	13·59	16·71
1,640	9·58	10·36	12·21	15·92
1,861	7·66	8·9	9·74	13·67

The result of a separate detailed inquiry as regards Hamburg and Berlin is to show clearly that the majority of the factory hands in these two cities spend far too large a proportion of their earnings on rent. If we take 20 per cent. of earnings as the maximum which should, in the interests of the whole family, be set aside for rent, we arrive at the disquieting conclusion that a good 40 per cent. of the workers in these two towns are obliged, in their outlay on rent, to exceed this maximum.

Examining the returns according to wage-classes, we get a still gloomier social picture. In the following table, column two shows the percentage spending up to 25 per cent. of their earnings on rent, column three the percentage spending over 25 per cent.

on rent, column four the percentage of column three spending over 30 per cent. on rent.

Weekly wage.	Percentage of workers spending		
	Up to 25 per cent. on rent.	Over 25 per cent. on rent.	(Of col. 3) over 30 per cent. on rent.
Up to 18 m.	62	38	20
18 „ 21	66	34	13
21 „ 25	77	23	10
25 „ 33	89	11	4
30 „ 35	94	6	1
Over 35	97	3	—

In other words, of those earning under 21 m. a week more than a third pay away *over 25 per cent.* for rent; of those earning up to 18 m. a week one in five pays away *over 30 per cent.* for rent.

It is true that in a large number of cases the payment of these relatively excessive rents is facilitated by underletting or by the earnings of other members of the family being available to supplement the father's wages. But there can be no doubt that in the majority of the cases where the rent paid amounts to more than 25 per cent. of the wage received by the father the family suffers in its internal economy. The amount available for wholesome food and clothing is reduced below the minimum essential for physical efficiency. Last but not least, high rents among the working classes invariably spell overcrowding, with all its attendant evils.

ERNEST LESSER

A METHOD OF DETERMINING THE NUMERICAL VALUE OF ELASTICITIES OF DEMAND.

§ 1. An increasing amount of attention is being paid by State Departments and private persons to the study of workmen's budgets, and a number of tables have already been printed to show the proportion of their income which families in different income grades expend upon various principal groups of commodities. I wish to suggest that the statistical material thus made available affords opportunity to patient arithmeticians to investigate by a new method the magnitude of the elasticities of demand of some important consumable commodities.

* § 2. To exhibit the nature of this method I shall suppose that our data are better than they are, and that we possess tables showing the expenditure of the group of workpeople whose wages lie between 20s. and 21s., of the group whose wages lie between 21s. and 22s., and so on continuously for all wage levels. With this close grouping we may fairly assume that the tastes and temperament of the people in any two adjacent groups are approximately the same. That is to say, the quantity of "utility" obtained from the x th unit of any commodity, say tea, is equal for typical men in the 20s. to 21s. group, and in the 21s. to 22s. group. Let this quantity for all values of x be fx or, in other words, let the utility curve in respect of successive increments of the commodity tea be represented by $u = fx$. We are enabled to assume further, in the absence of special evidence of correlation of demand, that the utility curve of both groups for tea is approximately independent of the quantity of other commodities consumed, and, therefore, of the marginal utility of money. Let this marginal utility to the lower and higher wage-groups respectively be μ_1 and μ_2 , and the quantity of tea consumed by these groups x_1 and x_2 . Then, since the price paid for the commodity must be the same for both groups, we know that this price p is equal both to $\frac{1}{\mu_1} fx_1$ and to $\frac{1}{\mu_2} fx_2$. These two expressions are, therefore, equal to one another. But if, as is reasonable to suppose when the wages of the two groups are close together, x_2 differs only slightly from x_1 , fx_2 may in general be written $fx_1 + (x_2 - x_1) f'x_1$.

$$\therefore \frac{1}{\mu_1} fx_1 = \frac{1}{\mu_2} [fx_1 + (x_2 - x_1) f'x_1].$$

But the elasticity of the utility curve in respect of any consumption x_1 is known to be equal to $\frac{fx_1}{x_1 f'x_1}$. Therefore the elasticity of the utility curve for tea in respect of both our groups

$$= \frac{x_2 - x_1}{x_1} \cdot \frac{\mu_1}{\mu_2 - \mu_1}$$

But, since a small change in the consumption of any ordinary commodity on which a small proportion of a man's total income is spent cannot involve any appreciable change in the marginal utility of money to him,¹ the elasticity of the utility curve in

¹ Strictly, of course, such a change must involve some alteration in the marginal utility of money unless the demand of the commodity in question has an elasticity equal to unity. If the elasticity is anything other than this, a change in its consumption will be accompanied by a transference of money from expenditure upon it to expenditure on other things, or *vice versa*. This must effect the marginal utility of money in these fields, and its marginal utility, if affected in one field is, since it must be equal in all, affected in all.

respect of any consumption x_1 is equal to the elasticity of the demand curve in respect of that consumption. Therefore, the elasticity of demand for tea of the lowest wage-group, in respect of its consumption of x_1 units of tea, is given by the equation :

$$\eta = \frac{x_2 - x_1}{x_1} \cdot \frac{\mu_1}{\mu_2 - \mu_1}$$

If we knew the relative values of μ_1 and μ_2 , this equation would enable us to determine the elasticity of demand of the lowest wage-group for all commodities in respect of such quantities of the commodities as they are consuming. Similar equations would enable us in like manner to determine the corresponding elasticities of each of the other wage-groups. If it is objected that our result would in practice be impaired by the fact that the higher wage-groups are apt to consume a better quality of commodity, as well as a greater quantity than the lower wage-groups, the difficulty is easily overcome by substituting in our formula for the quantities consumed (x_1 and x_2) of the commodity in question figures representing *aggregate expenditures upon it*. This device escapes the suggested objection by treating improved quality as another form of increased quantity.

§ 3. The result established in the preceding section is not, however, the one which prompted me to write this note. For, in order to obtain quantitative knowledge of the magnitude of any elasticity from that result, we need to evaluate μ_1 in terms of μ_2 ; and this we cannot do. The point to which I wish to draw attention may be displayed thus. By the process indicated above, the elasticities of demand in any wage-group can be determined as regards all the things consumed in that wage-group in expressions involving μ_1 and μ_2 . Let these elasticities be e_x, e_y, e_z , and so on. It follows that any one of these elasticities can be determined in terms of any other without reference to μ_1 and μ_2 . These unknowns are eliminated, and we obtain the formula

$$e_y = e_x \cdot \frac{x_1}{x_2 - x_1} \cdot \frac{y_2 - y_1}{y_1}$$

This result, it should be observed, only follows directly from the preceding argument provided that the commodities concerned are both such that only a small part of a typical man's income is normally spent upon them. In general, however, though the absolute formula for elasticities from which the result is derived is only valid on this assumption, the above comparative formula is approximately valid also in respect of two commodities on which a large part of a typical man's income is spent, provided that the part spent on the one does not differ greatly from that spent on the other. The reason for this is that the errors in the two

formulae for absolute elasticities which have to be combined will tend to balance one another. The only case, therefore, in which our comparative formula must be seriously suspected arises when it is used to obtain the relative elasticities of the demands of a group for two things on one of which it spends a large and on the other a small proportion of its income. Apart from this case, the formula, when applied to the statistics of quantities of, or expenditures upon, different commodities by neighbouring wage-groups, enables us to determine numerically the ratio of the elasticity of demand of any wage-group for any one commodity (in respect of the quantity of the commodity actually consumed by it), to the elasticity of demand of the group for any other commodity. This information will often be valuable in itself. It is important to know whether the demand of workers with 25s. a week for clothes is about twice or about ten times as elastic as their demand for food. But the information is also valuable indirectly. For by it, if we can in some other way—through the examination of shop-keepers' books or otherwise—determine the elasticity of demand of a group of workpeople for one thing, we have a bridge ready along which we may proceed to determine the elasticity of their demand for all other things.

§ 4. In explaining the above method I have, as indicated at the outset, tacitly assumed that our data are better than they are. This, I think, is legitimate, because there is no reason in the nature of the case why these data should not be improved; and, indeed, there is little doubt that they will be improved. Even then, of course, anyone attempting a detailed application of the method is certain to encounter serious difficulties, among which, perhaps, not the least will be that of deciding how far to treat different commodities separately and how far to group them together according to the purpose which they jointly serve. When put to the test these difficulties may, no doubt in some cases, prove insurmountable. From the results of an experiment made upon figures given in the second Fiscal Blue-book (pp. 215 and 217), I am, however, tempted to hope for better things. The figures refer to the expenditure upon "food" and "clothing" of groups of workpeople whose wages were respectively under 20s., between 20s. and 25s., between 25s. and 30s., between 30s. and 35s., between 35s. and 40s., 40s. and above. My method gave the ratio of the elasticity of demand for clothes to that for food for the several groups as follows:—

Workmen under 20s.	...	...	...	...	1.16
From 20s. to 25s.	...	...	...	...	1.81
From 25s. to 30s.	...	...	...	...	1.62
From 30s. to 35s.	...	...	...	...	1.25
From 35s. to 40s.	...	...	...	...	2.46

Apart from the drop in the ratio in the case of families earning from 30s. to 35s.—and it may be remarked in passing that the instances from which the average in this group are made up are only half as numerous as those in the two adjacent groups—these figures are continuous and in no wise incompatible with what we should expect from general observation. It is natural that among the very poor the demand for clothes should be nearly as inelastic as the demand for food, and that, as we proceed to groups of greater wealth, its relative elasticity should grow. My small experiment, therefore, is not discouraging. I sincerely hope that some economist will undertake a thorough exploration of this field of investigation. His labour would not, I think, be without result.

A. C. PIGOU

LETTER FROM JAPAN.

As stated in the last letter,¹ Japan did not escape the influence of the New York panic in 1907. The reason was, in the first place, that it came to her before she had quite recovered from the effects of the great war and from the financial disturbances of the extraordinary industrial buoyancy which followed the war. Her export trade had to suffer, because the demand for silk and "habutae," the most important of the Japanese exports, had suddenly decreased, not only in the United States, but also in Europe, while the fall of silver prices caused the decline of her exports to China and other Oriental countries.

The depression increased towards the end of 1908 and the beginning of 1909. However, the revival of the world's trade and the higher price of silver caused Japan's export trade to increase, both in the Western and the Oriental countries. In the autumn of 1909 general recovery was in view. But there now arose a new cause for depression—the fall of the price of rice, on account of the presumed vast increase of the crop. In no other country does a single kind of agricultural product retain such an important position in the national economy as rice does in Japan. Nor in any other country does the agricultural class form such an important part of the community as in Japan. The fall of the price of rice caused a universal decrease of demand for every kind of article; and a general fall of prices was again experienced.

¹ See ECONOMIC JOURNAL, March, 1910.

The cry of depression became louder throughout the country, but in reality the good crop and the fall of price must, of course, ultimately lead to general benefit. Lower prices will lower the cost of production, leading thereby to the increase of export trade and to the general welfare of the nation.

2. Money Market.

By the redemption and conversion of national debt ease was given to the money market, which had been dull since the end of 1907. Especially in Tokio and Osaka, the bank deposits greatly increased. The Post Office deposits have also been steadily increasing month after month. Under these circumstances, money must necessarily be very cheap, causing a steady fall of the rate of interest. The Bank of Japan rate fell from some 7 per cent. in 1908 to 4.75 in 1910 (March to June), and the rate allowed on deposits also underwent a great fall.

In consequence it became more profitable for the public to purchase bonds and shares. Moreover, even the first-rank bankers bought large amounts of bonds and shares in order to lessen their losses from keeping much unused money. The prices of bonds and shares, especially of the former, have therefore been rising almost incessantly.

The fundamental fact is that the demand for money cannot keep pace with the sudden increase of supply.

Bankers are now in great difficulty to find out borrowers. Still, the low rate of interest will gradually increase the demand for money by stimulating a spirit of enterprise. As the proof of this, since the beginning of this year the amount of funds for new enterprises and for extension shows a substantial increase. According to the calculation of the Bank of Japan these figures stand: in 1906, 1,001,576,800 yen; in 1907, 674,777,160 yen; in 1908, 135,232,120 yen; in 1909, 128,257,535 yen; in 1910 (during the first six months), 272,324,400 yen. Of these fresh enterprises the most important are electric, water-power, light and car works, as well as gas works.

3. The Budget.

The new financial scheme of Marquis Katsura's Cabinet, the general outline of which was given in my previous letter,¹ was faithfully carried out in the last fiscal year. In framing the budget for the present fiscal year (1910-1911) the Government

¹ See ECONOMIC JOURNAL, XX., p. 123.

strictly upheld the same principles. The debt redemption and sound finance are its first and most important aims. The sum turned into the redemption fund for this fiscal year is 60,800,000 yen, being an increase of 10,000,000 yen over last fiscal years. As to the adjustment of taxation the Parliament was not of quite the same opinion as the Government. But at last the Government and the Diet came to an agreement by the reduction of the land tax by 8 per cent., the reduction of the income tax being left to future consideration. Other taxes have undergone changes, while on the expenditure side there was an increase in the salaries of officials. The following table shows the figures of the final budget for 1910-1911, compared with those of the preceding fiscal year.

REVENUE.					
			1909-1910.		
			Yen.		
Ordinary	...	...	470,357,136	...	...
Extraordinary	...	...	48,575,147	...	...
Total...	...	...	518,929,283	...	...
EXPENDITURE.					
			1909-1910.		
			Yen.		
Ordinary	...	...	404,700,516	...	...
Extraordinary	...	...	114,220,595	...	...
Total ...	...	...	518,921,111	...	...

Otherwise, the budget for 1910-1911 is devoid of any marked deviations from the one preceding, showing thereby that the financial ground-work is becoming more stable and less fluctuating.

4. *Conversion of National Loan Bonds.*

The Katsura Ministry, not being contented with mere redemption of the national loan bonds, decided for their conversion into bonds bearing low interest. As the result of sound finance, and especially of the annual redemption of the bonds, the market prices of various Government bonds have gradually been rising. At the beginning of 1910 both the 5 per cent. Consolidated Public Loan Bonds and the Imperial Japanese Government 5 per cent. Bonds went above face value. Seizing the golden opportunity, the Government decided to issue new 4 per cent. bonds. As the first step in this plan, Marquis Katsura consulted leading bankers in Tokio and Osaka. The banks formed a syndicate in February to underwrite and make the issue a success, and the Government

announced the first issue of the 4 per cent. Domestic Bonds of 100,000,000 yen on following conditions. —

Lowest price of issue, 95; interest, 4 per cent.

Term of redemption, 60 years, of which the first ten years remain unredeemable.

About twice the amount wanted having been subscribed, the Government immediately issued in March the second of the 4 per cent. bonds, on almost the same conditions as the first, which ended with almost the same result as the preceding one.

In these two issues the amount subscribed with the old 5 per cent. bonds of various kinds in the way of conversion, was about 125,000,000 yen. And there remained still yen 376,953,865 of the unredeemed 5 per cent. bonds whose term came to maturity. Of this the privately exported Japanese domestic bonds were calculated to be about 70,000,000 yen. Besides those exported to London with the exchange guarantee in 1897 and 1902 were about 93,000,000 yen. To redeem these bonds mainly, issues were made in foreign markets. On the 25th of April 450,000,000 francs (174,150,000 yen) was issued in Paris.

The terms were as follows:—

Interest, 4 per cent; issue price, 95½.

Term of redemption, 60 years; term of non-redemption, 10 years.

A week after the sterling loan of £11,000,000 was issued in London on nearly the same conditions, the only difference being that the issue price was 95 instead of 95½.

On the 6th of May the Government announced that all the Government bonds which were exported with exchange guarantee should be redeemed on the 1st of July, and that all the other domestic 5 per cent. bonds of various kinds, the amounts of which are given below, should be redeemed between the 30th of May and the 30th of July, to be converted at the holders' option into the new 4 per cent. bonds.

Consolidated Bonds, yen 88,184,950.

War Loan Bonds, yen 57,824,450.

Formosan Public Works Loan Bonds, yen 100,140.

Imperial 5 per cent. Loan Bonds, yen 60,295,550.

This is known as the third conversion, and in this way all "the matured" 5 per cent. national loan bonds were made to disappear by the end of July, both in foreign and domestic markets.

5. *Foreign Trade.*

Year.	EXPORTS.		IMPORTS.	
	Yen.		Yen.	
1905	...	321,533,610	...	488,538,017
1906	..	423,754,892	...	418,784,108
1907	...	432,412,873	...	494,467,346
1908	...	378,245,673	...	436,257,462
1909	...	413,112,511	...	394,198,843

The excess of exports over imports in 1909 is 18,913,668 yen, and compared with the previous year the increase of exports is 34,866,838, while the imports decreased by 42,058,619 yen. In 1906 and 1907 the trade was brisk as the result of the buoyancy after the Russo-Japanese War, and then came a reactionary depression, causing the fall in our trade for successive years.

The prospect of this year, 1910, is rather promising. The following table shows the figures for foreign trade in the first six months compared with those of the same period of the previous year.

From January to June.

		1909.	1910.	Increase.
		Yen.	Yen.	Yen.
Exports ...	...	187,000,295	211,237,830	24,237,035
Imports ...	...	214,517,975	239,948,755	25,430,880
Excess of Imports		27,517,680	28,711,425	1,193,745

The prevalence of thrift caused a diminution in importation of luxuries, while the increase in imports of raw material, as well as of general exports, may be taken as the sign of a healthier condition of productive activities.

6. *Prices and Wages.*

Prices in Tokio had been gradually rising during these ten years. The most striking rise of prices occurred during and after the great war. In October of 1907 the index number for general prices was at the climax, showing 133.61, as compared with 100 in October, 1900. Then came the general depression. The prices began to fall all at once, and at the end of 1908 the number stood at 117.54. At the end of 1909 it was 116.57; but had risen to 119.59 by May, 1910.

Cheap labour in Japan has long been an admitted fact. But the rise of general prices and the improvement in the living of the labouring class caused a rise of wages, as shown below.

	1900	1901	1902	1903	1904	1905	1906	1907	1908
	Yen	Yen	Yen	Yen	Yen	Yen	Yen	Yen	Yen
Farm Labourer...	0.235	0.320	0.323	0.313	0.330	0.320	0.340	0.360	0.360
Tailor ...	0.558	0.620	0.598	0.573	0.590	0.640	0.680	0.740	0.770
Shoemaker ...	0.473	0.505	0.538	0.535	0.560	0.570	0.580	0.580	0.630
Confectioner	0.298	0.315	0.340	0.358	0.330	0.340	0.330	0.360	0.390
Carpenter ...	0.535	0.593	0.583	0.588	0.590	0.600	0.650	0.750	0.810
Plasterer ...	0.540	0.590	0.593	0.605	0.600	0.600	0.650	0.760	0.850
Tile Roofer ...	0.585	0.640	0.635	0.650	0.640	0.650	0.730	0.870	0.970
Printer ...	0.340	0.380	0.370	0.363	0.360	0.380	0.390	0.440	0.480
Blacksmith ...	0.475	0.428	0.515	0.523	0.550	0.550	0.570	0.650	0.680
Cartwright ...	0.465	0.498	0.488	0.485	0.470	0.510	0.520	0.630	0.680

Moreover, when we take into consideration the real efficiency, the so-called cheapness of Japanese labour becomes very doubtful, if not quite groundless.

7. Important Bills in the Parliament.

A. *Ownership of Land by Foreigners.*—Foreigners were free to enjoy other rights except the ownership of land. The removal of this disability has long been a matter of public discussion. At last a law for its removal was promulgated in April, 1910, the essential provision being as follows: Foreigners domiciled or resident in Japan and foreign juridical persons registered therein shall enjoy the right of ownership in land, provided always that in the countries to which they belong such right is extended to Japanese subjects and Japanese juridical persons; and provided further, in case of foreign juridical persons, that they shall obtain permission of the Minister for Home Affairs in acquiring such ownership, with some further reservations.

B. *Factory Law.*—As the industry of this country is not yet highly concentrated, the evils arising from the factory system are not so severely felt as in other industrial countries. However, in cotton-spinning and weaving factories female and juvenile hands are largely employed. Injurious effects of over-work and night-work on them are naturally keenly felt. For more than a score of years the author has been urging the necessity of some sort of factory legislation, but to no effect. However, in 1898 a draft of a Factory Act was presented by the Ministry of Agriculture and Commerce to the Higher Council of Agriculture, Commerce, and Industry then in existence. In 1902 the House of Representatives passed a petition asking for legislation for the factory workers. Then the Russo-Japanese War intervened, and nothing was done except that some provisions were made for the mining labourers in 1905.

In 1909 the House of Representatives asked the Government

why the latter did not present the Factory Act, and the Government submitted to that House a Bill, some important clauses of which are given below.

Art. II. Factory owners are not allowed to employ children under twelve years of age. This does not apply to cases where the owners continue to employ children over ten years of age at the time of the coming into force of the present Act, or where they employ children over ten years of age with the permission of the administrative authorities concerned.

Art. III. s1. Factory owners are not allowed to employ women and minors under sixteen years of age during the night time.

Art. IV. s1. Factory owners are not allowed to employ women and persons under sixteen years of age for more than twelve hours a day.

Art. XIII. Factory owners shall extend such relief as is provided by Imperial Ordinance to factory workers, or their family relatives, when such workers are injured, fall ill, or die, while discharging their duties without gross negligence on their part.

Art XIV. Rules concerning the engagement, or discharge, of factory hands, those relating to the business of supplying them, and those relating to apprentices, are to be fixed by Administrative Orders.

In order to be well advised, the Ministry of Agriculture and Commerce sought beforehand the views of Prefectural Governors, of the Chambers of Commerce, and of various industrial associations. By far the great majority of them approved of the draft and its underlying principles. But when it was presented to the Lower House, the special committee of the House was not in favour of that Bill as it stood, one of the chief reasons being that it gave too much room to Administrative Orders. There being no sufficient time to reframe it before the end of the session, it was withdrawn on February 26th. It is, however, expected that the Bill will, after being revised and improved, be again brought forward in the next session of the Diet.

C. *The New Tariff Bill.*—Since the opening of the country, Japan has long been subject to an unfair one-sided tariff system. Even at the time of the general alteration of treaties with foreign countries in 1894, many anomalies still remained.

As the result of much room being left to conventional tariffs in these treaties, the general tariff, which was enacted in 1897 and came into force in 1899, and which was greatly revised in 1906, was applicable to very few cases. As the term of the

treaties expires in 1911, the Government, after a long and thoroughgoing investigation, presented a new tariff Bill to the Diet, which passed it with some slight amendments. There is a systematic principle pervading the new tariff. Much may be said for or against that principle. But one thing must be made perfectly clear. No unfair discrimination is made, and a charge, that it is wilfully directed against goods of British origin is quite unfounded.

D. *The Internationalisation of Manchurian Railways.*—The proposition of the U.S. Foreign Office that the Manchurian railways should be placed under an international management, caused no little surprise. The only way opened to us was to make it clear that our situation in Manchuria, which was achieved with the greatest sacrifices, must be well taken into consideration, and also that as the open door and equal opportunity are our avowed policies there is no necessity for fundamentally changing the administration of Manchurian railways. With the new agreement with Russia about the preservation of the *status quo* in these localities, the peace of the Far East is now made more secure. It is time for other countries to avail themselves of the security given for their trade and industry. It is essential that somebody keeps guard and acts as police in these regions, for if left alone, corruption, pillage, and all other forms of lawless barbarism will be sure to have sway. It is, then, a matter of urgency for the sake, not only of international commerce, but also of humanity at large, that peace and order are kept in these regions by the nearest and most justified.

JIUCHI SOYEDA

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The Co-operative Congress at Hamburg and the Socialist Congress at Copenhagen.

THREE years ago we sent to the ECONOMIC JOURNAL a report of the Congress of the International Co-operative Alliance, which had met in Italy at Cremona. This year it met in Germany, at that city which is the chief centre of co-operative consumption in Germany. And it thereby paid a just tribute to the country which has for a decade made so vigorous an advance in the co-operative movement, that it aspires before long, in this direction no less than on the sea, to rival Great Britain. The

co-operation of consumers, hitherto a product hall-marked by England, will soon be entitled to wear the well-known label "made in Germany"! For instance, the Hamburg Co-operative Wholesale, started in 1894, and thus only in its seventeenth year, now records sales of the value of £3,700,000, while the Manchester Co-operative Wholesale, when equally young (in 1880), had sold only £2,720,000 worth. Moreover, it is in Germany that we find some of the largest co-operative societies in the world. Hamburg has only 42,000 members, but Breslau numbers 90,000 which holds the record.

Nevertheless it was not the present state of Co-operation in Germany that formed the centre of interest at the Hamburg Congress. It was the presence of a little band of Socialists, who had crossed from Copenhagen, where in the preceding week the International Socialist Congress had taken place, and the fact that this band had come to sign a treaty of alliance, or, at the very least, to form an *entente cordiale* between Socialism and Co-operation.

Here is an event which ought not to pass unnoticed in the history of the social movement of to-day, but which, let us be sure, it is worth while to explain, even if the facts I propose to recall have a more direct interest for French and foreign readers than for those of England. We must seek our clues somewhat far back.

During the greater part of the nineteenth century—till towards 1870—Socialism and Co-operation were not only on good terms mutually, but were not distinct one from the other. In England at the Owenist epoch, Co-operation and Communism were held to mean practically the same thing. In France co-operative association (in production rather than in consumption) was the ideal of all Socialists of the Fourier school. And there was never a congress of Labour without a resolution being passed affirming their faith that in co-operative association lay deliverance for the proletariat.

But when the doctrines of Marxist Socialism had begun to permeate the masses, all this changed, and Co-operation was thenceforth discredited and even ostracised. Karl Marx taught a very different Socialism from that preached by Owen and the French Socialists. We may even say, without any paradox, that his doctrine was much more directly an outcome of that of Ricardo and the classic economists. He had studied very carefully the capitalistic system in the country of its highest development, namely, in England, and far from scoffing at it as his predecessors

had done, he was greatly impressed by it. He held it absurd to propose to supersede that system by any other, Co-operation or what not. And being a thorough-paced determinist, he believed it chimerical to seek for a scheme of social reorganisation with a view of rendering society better and happier. The capitalistic system itself, by the latent action of its inherent forces, would become spontaneously transformed. The working classes would only require to instal themselves, peacefully or by force, in the frames constructed by the classes now at the head of affairs. Where then would be the use of constructing a complete co-operative organisation? If started, such an organisation in developing, could only have the deplorable effect of misleading the evolution of capitalism, and of hindering its attaining that point of maturity when it would be fit for Socialists to pluck. It would only have the further, and also disastrous effect, of diverting the workers from the class war, by bestowing on them certain immediate advantages and in giving them a taste for thrift, bonuses, and other bourgeois virtues. Added to which there is the Socialist doctrine that wages do not rise above the cost of living, and that consequently if consumers' associations reduce the cost of living for the working classes, they will have the effect of lowering to the same extent the rate of wages.

Hence it is that, since Marxist theories have penetrated the labour world, Co-operation has been rejected as a superannuated and bourgeois institution, and the Socialist programme speaks only of class war and "the socialisation of the means of production." So far as France is concerned, we can fix the date of this inverted attitude precisely. It was in 1879, at the Labour Congress at Marseilles, when a young ardent disciple of Marxism, Jules Guesde, ousted the motion on the programme of the day in favour of Co-operation, by carrying an amendment purely collectivist in its contents.

From that day it seemed evident that, on the Continent at least, the divorce between Socialism and Co-operation was absolute. The success of Co-operation in England produced no impression on labour in France and Germany, either because it was not heard of or because it was reckoned that the results obtained by way of bonuses were injurious rather than otherwise to the progress of Socialism.

But if England's example was not enough to enlighten the working classes as to the benefits of Co-operation, that of another country, namely, Belgium, began to open their eyes. It was in 1880 that the co-operative movement began in Belgium; and

from the outset it was intimately associated with the Socialist movement. We may even say that in Belgium the Socialist party was the work of co-operators. It was the latter who banded wage-earners together round the *Vooruit* at Ghent, or the *Maison du Peuple* at Brussels, and bound them inextricably to themselves both by the many material advantages secured and by severe regulations. It was only in Belgium that the leaders of the co-operatives, first Césaire de Paep, then Anseele, Bertrand, Vandervelde, although they did not consider Co-operation as sufficient of itself, nevertheless saw in it an instrument in the service of Socialism. Co-operation was to prepare the way for future socialisation by educating the people, by putting them through their apprenticeship in economic government, and by supplying them with provisions for war.

These new aspects of Co-operation made a lively impression on French Socialists. They began to acknowledge that Socialism might find in Co-operation as much support as in trade unionism, and that it would walk quicker and firmer on both of these legs than on one of them only. And then co-operatives began to be founded, formed after the Belgian model and with the same plan of action. It was naturally in the department of the Nord that they preponderated, that district being on the Belgian frontier and containing the majority of the industrial population of France.

These Socialistic co-operatives of the Belgian type, however, were very anxious to distinguish themselves from co-operative non-Socialists of the English system. To compass this end they made it a rule to suppress, or at least to reduce to a minimum, the distribution of bonuses among members. The funds thus saved were to be reserved for measures of solidarity and of Socialist propaganda, or even for running Socialist papers and Socialist candidates for municipal and political elections. They lent thus at once a Socialistic and political flavour to their co-operatives.

This fashion of rather contemptuously utilising Co-operation as the milch-cow of the Socialist party did not commend itself to the taste of co-operators in other countries, including Germany, Switzerland, Russia, and even the majority of French co-operators, who had remained faithful to the Rochdale tradition. These all declared that Co-operation ought to be suffered to pursue its work of social transformation in its own independent way, and by its own resources; it should not be carried on in subordination to the Socialist party, because the inevitable result of this would be the secession of a great number of its adherents and a consequent diminution of its resources.

Now this principle of *neutrality*, which was inscribed in the statutes of the International Co-operative Alliance at its inception,¹ has just been confirmed afresh by the revision of the statutes at Hamburg.

But the most important thing is that this question of neutrality has been also raised at the last three Socialist Congresses: The National French Congress at Paris, the National German Congress at Magdeburg, and the International Congress at Copenhagen. Long and excited discussions took place between the partisans of Co-operation as carried on by the Marxists and the Belgians, and the partisans of neutral and independent Co-operation. But the majority went with the latter, and declared with no uncertain voice, both at Paris and at Magdeburg, that they repudiated all bonds of dependence, and all compulsory contribution exacted from co-operatives for the benefit of the Socialist party. They maintained that it was the duty of the latter "to encourage the free development of Co-operation." The Copenhagen Congress, anxious to satisfy both parties and so gain a unanimous vote, expressed its resolution in less definite terms. It declares that "Co-operation of itself was powerless to obtain the ends pursued by Socialism. . . . It put workers on their guard against those who affirm that Co-operation was sufficient by itself." Nevertheless, it declared that the three great Labour movements—Trade Unionism, Co-operation, Socialism—"while they ought to preserve their autonomy, should join together in relations of ever-increasing intimacy."

And the Congress of the Co-operative Alliance, at Hamburg, took note of this manifesto of sympathy and responded with reciprocal good wishes.

This exchange of congratulations between the two Congresses marks a new era in the relations between Socialism and Co-operation, and inaugurates a fourth phase. The first was one of identity between the two movements. The second was one of hostility, or at least of indifference. The third was that of the subjection of Co-operation to Socialism. The fourth will be that of an alliance between these two great forces, conditioned by a full independence for each.

CHARLES GIDE

¹ (Art. 2). The Alliance occupies itself neither with politics, nor with religion. Co-operation is a neutral territory, on which persons professing every variety of creed and opinion, may meet and take measures in common.

Juvenile Labour in Germany and How it is Being Dealt With.

Being a Report by MISS F. HERMIA DURHAM (Inspector of Women's Technical Classes in London) to the Education Committee of the London County Council. (No. 1514. 1910. Pp. 14. Price 3d.)

THE chief complaint which has to be made with this very able little report is on the score of its brevity. No doubt there were very good reasons for this; but what we have before us makes it regrettable that it was not possible to deal with a larger number of towns, or to treat more fully the four that are the subject-matter of the present paper. These four have been well selected, and each has a character that is peculiarly its own. Berlin, as the capital, corresponds in many ways to London, though Miss Durham shows that points of difference are numerous. Cologne "stands on the threshold of the old and the new systems. Large ironworks and factories have grown up in its suburbs, while in the old town the small hand trades, and little masters with apprentice labour, still manage to hold their own." In this country a similar contrast between the large factory and the small workshop can be found in Birmingham and Sheffield, though the former system has probably established a greater supremacy in our own towns. Strasburg, again, as the capital and centre of an agricultural district rather than a manufacturing town, resembles the two East Anglian capitals of Norwich and Ipswich. Munich's position is, however, unique. A city of 561,000 inhabitants, it still remains faithful to the old system, the proportion of little masters being probably unequalled anywhere else.

Miss Durham points out that the evils of unskilled boy labour are not so great as in England. Street-trading and child labour are unknown—even in Berlin. Errand boys, though on the increase, are not, in proportion, so numerous as in London, and the van-boy is unusual; for a second of a van is normally a man, as with brewers' drays in this country. "The telegraph and messenger services are performed by men (usually ex-soldiers)." On the other hand, there is a growing demand for unskilled boy labour, but the danger of this is lessened by the absence, or comparative rarity, of the most injurious forms of it. The distinction between "skilled" and "unskilled" in Germany is different from what it is in England, "depending more on quality than on artificially-defined grade."

The better conditions that exist in Berlin are attributed by

Miss Durham to four things :—its newness ; its local traditions ; the compulsory association of masters, and, consequently the better organisation of industry ; and definite remedial measures. She omits, however, the even more important influence of demand. The returns for unskilled boys show little more than a sufficiency as it is, even with the removal of the various employments mentioned in the preceding paragraph. Moreover, the Continuation School statistics for Berlin show only some 10,000 unskilled out of 30,000, though the inclusion as apprentices of all boys working in scheduled trades, whether skilled or unskilled, exaggerates the proportion of them, since unskilled boys working in skilled trades would be counted as such. However, an incomplete list of the apprentices on the rolls of the Berlin Handwerkerskammer for 1909 numbered over 31,000, and, even so, thirteen guilds were excluded. At any rate, there does not seem to be in Berlin that terrible shortage of openings for skilled boy labour that meets the investigator in London. So far as girls are concerned, they appear to have obtained a far smaller proportion of skilled processes than in England ; but those girls who enter them have apparently little difficulty in finding places.

One may now deal shortly with the measures for the organisation of adolescent labour as they exist in Germany, beginning with apprenticeship. This is still comparatively common, even in Berlin, though the same forces which are telling against it in England are at work. It is interesting to notice the struggle of some of the larger employers in Cologne to escape the apprenticeship regulations of the Handwerkerskammer (Handworkers' Associations), and the admission of the right of factories to an organisation of juvenile labour to suit their general methods. The period of apprenticeship is usually three or four years, and is continued, one imagines, in a further period of *Wanderjähre*, though this is not mentioned by Miss Durham. In the writer's view short apprenticeship, followed by work as an improver, is most suited to modern conditions, where these still allow some sort of apprenticeship, and this method appears to be expanding in England. The period of apprenticeship for girls is very short, and that suggested by Miss Durham hardly consistent with fairness to the employer. What, however, is most valuable in the German system is the arrangement for ensuring the capacity of a master to teach an apprentice. In Cologne at any rate, masters are required to prove their fitness to teach before they can take one. Moreover, the Education Authorities extend their

supervisory activities "to ensure that the masters not only carry out their obligations to the boys in their workshops, but see to their attendance at continuation schools." In England a start has been made in this direction by After-Care Committees and Skilled Employment Associations; but such tests and supervision might be carried still further, and might help to eliminate not only the exploiter who will not, but the more common case of the incompetent employer who cannot, teach his apprentices.

To turn now to the subject of After-Care generally. In those towns where the age of leaving is fourteen, the last year is devoted to manual training, though Miss Durham unfortunately does not say whether whole or only part time is devoted to this. The work of placing children, especially in the case of apprentices, is largely done by the teachers at these classes. They are usually skilled master-workmen, and therefore in the handicrafts in especially close touch with their trades and the Handwerkerskammer. This further helps to connect the "upper classes of the school and the continuation schools," but the exchange authorities fear confusion and overlapping, and rightly demand a more definite organisation. The difficulty appears to be less under German conditions than it would be here, and it might be met by compelling masters to report all the boys they placed to the exchange as well as all the vacancies and boys they failed to fill and place. After-Care as in England is coming to be more and more insisted upon.

It only remains to consider the question of continuation schools. The compulsory system would appear to justify itself, though it might be better if boys in unskilled jobs were compelled to attend up to eighteen years of age, as their fellows in skilled trades are. On the other hand, the almost purely theoretical character of the Berlin and Prussian schools has to be set against the more practical instruction in the far less numerous Technical Institutes in English cities. Drawing is the only practical work done in Prussia, but at Munich trade-training is given. The value of a hand-work trade, even to an unskilled worker, is fully recognised as developing his capacity and his adaptability; but the education authorities of Berlin insist upon the need of increased attention for unskilled adolescents.

In many ways German conditions differ too much from our own to allow their system to be applied in this country. Even where this is so, however, their methods are most illuminating. Here, in the absence of any institutions such as the Handwerkerskammer, the organisation of boy labour will have to

centre, more round the Labour Exchange, and will depend on its co-operation with the education authorities and especially the After-Care Committees. Possibly also existing machinery for dealing with the openings for skilled employment will have to be made general as part of the organisation of the Exchange, whilst the instructors of the Technical Schools can do much to carry out that supervision of masters and apprentices which in Germany is the work of the Gilds. In many ways Germany has to face the same problems of juvenile labour as we have. In some ways she has dealt with them more adequately and, on the whole, her difficulties are less than ours. The demand appears from Miss Durham's report to be fuller and more adequate. At least, there is little or none of that alarming insufficiency of openings for skilled employment which is so marked in London, and is in too many of our large cities a serious evil. Miss Durham is to be congratulated on covering so much ground in so short a space, and on the clearness with which she has treated a somewhat intricate subject.

N. B. DEARLE

London Statistics, 1909-10. Statistics of the Administrative County of London, and of the public services carried on therein; together with certain statistics of the adjacent districts. Vol. xx. (Compiled by the Statistical Officer of the London County Council.) (P. S. King and Son. 8vo. Pp. xv+592. Price, 5s.)

THERE are eighteen "Londons" of one kind and another (Administrative County, Water London, Parliamentary London, Greater London, &c.). In the Administrative County there are, besides police and justices, 144 local governing bodies, with an aggregate membership of over 4,300 persons; while in Outer London, excluding justices and minor bodies, there are some 194 more authorities, with over 3,000 members between them. The concentration in one volume of the statistics of these "Londons," and of the multitudinous activities of the numerous authorities exercising powers therein, must be a heavy task. Yet it is undertaken each year by the Statistical Officer of the London County Council, who culls his materials partly from the data and records collected by his own Council and partly from the publications of Government departments and the various local bodies.

The result for 1909-10 is a large volume of 546 pages of statistics and explanatory text, and 42 pages of indices. But even so, one cannot complain of any superfluity of detail, but sometimes rather the reverse.

The statistics are arranged in eleven sections and forty-five sub-sections, covering the "machinery of public administration," census statistics, vital statistics, labour, pauperism, unemployment, public health, education, transport and communications, water, gas, and electricity, rates, old age pensions, and many other matters. Interspersed throughout the volume are three maps and twelve diagrams.

In a brief review of a book of this character one can refer only to two or three of the more interesting features. Such are the table on pages 12 to 15, giving a useful synopsis of the chief administrative or executive powers and duties of the principal local authorities in Greater London, and the section on Vital Statistics. In this section are tables showing rates of infantile mortality and the incidence of certain diseases in each London Borough, Urban Districts around London, and in large provincial towns and foreign cities. In the Administrative County as a whole, the rate of infantile mortality during the quinquennium 1903-7 averaged 130 per 1,000 births. In the separate Boroughs the rate ranged from 87 in Hampstead, 102 in Lewisham, 109 in Stoke Newington, and 110 in Westminster, to 146 in Poplar, 147 in Bethnal Green and Finsbury, 148 in Southwark, 150 in Bermondsey, and 167 in Shoreditch--or about twice as great in the last area as in the first. Generally speaking, but with important exceptions, the boroughs with high infantile mortality have a high density of population. Further, many of the boroughs with the high rates contribute at a greater rate to the population, or have a greater excess of the birth-rate over the death-rate, than the boroughs more favourable to infantile life.

Another interesting table is that showing the estimated changes in population of the various Boroughs in recent years. The figures take us no farther back than the last census of 1901, while one set of estimates, based on the number of rated houses in each borough on the 6th April, covers only the six years 1904 to 1909. Taking these latter estimates in preference to those based on the rate of change of population observed in the decennium 1891 to 1901, we find that the resident population of the City of London has fallen by 16 per cent. in the six years. The population of the surrounding belt (comprising Bermondsey, Bethnal Green, Finsbury, Holborn, Paddington, Poplar, St.

Marylebone, St. Pancras, Shoreditch, Southwark, Stepney, and Westminster). has likewise fallen to the extent of about 1·7 per cent. In actual numbers this central core of London (including the City) has lost from 30,000 to 40,000 persons in the six years, or about 1·9 per cent. of the total population. The next belt (comprising Battersea, Camberwell, Chelsea, Deptford, Greenwich, Hackney, Islington, Kensington, and Lambeth) has gained in numbers by about 1·5 per cent., or 25,000 to 30,000 persons, and the outermost belt of the Administrative County (comprising Fulham, Hammersmith, Hampstead, Lewisham, Stoke Newington, and Woolwich) has gained by about 10·5 per cent., or some 100,000 persons. If, however, account be taken of the natural increase of population (excess of births over deaths), the loss of population in the central area will be accentuated; the gain in the second belt will be converted into a loss; and only in the last belt will the growth of population be found to exceed the natural increase. There is thus apparent a strong centrifugal movement from the centre, decreasing in intensity, however, as it proceeds outwards. It should be noted that these conclusions are based on a very few years' experience and on estimates, and not enumerations, of the population.

Considerations of space preclude reference to other equally interesting tables, such as those summarising the proceedings of the London Distress Committees (p. 88 *et seq.*), and those dealing with the employment of children (p. 193 *et seq.*). The book is, of course, not without its faults. For example, a table given in a footnote on page 46 is without headings, for which one's eye has to travel to the top of the page over intervening letterpress and another table—an inconvenience not justified by the small saving of space effected in the footnote. Generally, the short notes prefixed to the tables explanatory of the statistics are admirable and as full as can be expected. Occasionally, however, the explanations or definitions are inadequate or lacking. For example, the table on pages 78-9, showing the numbers of persons relieved in each poor law union in 1906-7, and other particulars, requires more explanation than is given to it. Especially does the heading, "Number of times relief was granted," need definition. Does it mean the number of times any given pauper actually received relief, or the number of times the guardians made separate orders for his relief? Again, the section on workmen's compensation (p. 192) is singularly bare of any explanatory or descriptive text whatever. One may ask, too, why on four different pages (8, 10, 518, and 543) the assessable

value of the City of London is given as four different amounts on the same date?

These, however, are comparatively small faults and detract little from what is a very useful and valuable compendium of statistics of the world's greatest city.

A. D. WEBB

SOME RECENT OFFICIAL PAPERS.

Report of an Enquiry by the Board of Trade into Working-class Rents, Housing, and Retail Prices, together with the Rates of Wages in the Principal Industrial Towns of Belgium. (Cd. 5,065.)

A SEQUEL to the reports which have been given for Germany and for France.

Report on Changes in Rates of Wages and Hours of Labour in the United Kingdom in 1909. (Cd. 5,324.)

THE decline in rates, which commenced early in 1908, continued through the greater part of 1909. For the period, 1896-1909, the net effect of changes in rates of wages on an ordinary week's pay of the workpeople affected was an increase of £339,000.

Census of Production (1909). Preliminary Tables, Part IV. (Cd. 5,397.)

THE industries dealt with in this fifth instalment had a gross output of £257,215,000, and, deducting cost, a net output of £84,325,000.

Report on Collective Agreements between Employers and Workpeople in the United Kingdom. (Cd. 5,366.)

THE report deals with nearly 1,700 agreements, affecting 2,400,000 workpeople; with provisions relating not merely to rate of remuneration and hours of work, but matters such as the number of people to be employed on specified tasks, or the conditions of youthful labour.

THE latest statistics of profit-sharing published by the *Labour Gazette* show that at the end of June, 1910, the number of firms sharing profits was sixty-nine, the number of persons employed about 80,000. The ratio of bonus to wages was, in 1909, 5.2 per cent. of the wages paid, compared with 4.8 per cent. in 1908.

• *Bulletin of the Bureau of Labour* (Washington).

THE number for MARCH, 1910, continues the index number for *Wholesale Prices*, which in 1909, as measured by the prices of 257 commodities, were 3 per cent. higher than in 1908, yet 2·3 per cent. lower than 1907.

THE MAY number contains an investigation of the *cost of living in Germany* in 1907-8, and of the *trend of wages*, 1898 to 1907.

The Tenth Financial and Economic Annual of Japan, 1910 (Tokyo).

AMONG many admirably presented sets of statistics may be noticed an index number of wages based on the rates in forty-seven industries, expressed as percentages of the corresponding rates in 1900. [The median of the forty-seven percentages proves to be 143.] There is also an index number of prices of commodities compared with 1900. [The median of the fifty-one price-percentage, proves to be 115.]

CITY NOTES.

The Money Market.—Autumnal demands for gold have been on a very large scale during the past quarter, Egypt being the most importunate taker. With a big cotton crop fetching a high price, Egypt both required more currency than usual to move it and was able to draw more freely on buyers of the commodity. Early estimates of the amount that would have to go to Alexandria ranged up to £7,000,000, and were considered formidable enough; but the amount actually taken was over nine millions. Consequently the Bank Rate went up to 4 per cent. at the end of September, and was 5 per cent. before October was out. Market rates of discount followed the official rate with some reluctance, and the Bank was obliged to borrow very largely in order to produce the necessary stringency in the short loan market, and so screw up outside rates of discount; by these means it was able to turn the Continental exchanges in London's favour, and by paying a small premium for bar gold in the bullion market, it succeeded in replenishing its store, more or less, by purchases of bars arriving week by week from the mines of Johannesburg. It was also assisted by the return from Brazil of nearly £2,000,000, which came at an opportune moment, apparently owing to the confusion and uncertainty that had arisen with regard to Brazil's currency arrangements. Having got £20,000,000 in the *Caisse de*

Conversion. the Government had, or was said to have, an ambition to raise the rate at which it would henceforward take sovereigns into the Caisse to 16*d.* per milreis, and is believed to have drawn heavily on its London balances in order to raise the exchange value of the milreis above that level, which it succeeded in doing. But being unable to cover its drawings with produce bills, it had to send sovereigns, some of which came out of the Caisse, to replenish its balances. Such is the account given by City gossip of an unusual and remarkable episode. The gold arrived very aptly, but as it now seems likely that official ambitions will have to give way to commercial considerations, and that 16*d.* is likely to be the rate fixed on by the new Government at which it will reopen the Caisse to the receipt of sovereigns, there is some apprehension that all the metal which came over will go back to Brazil and more besides, since the state of the coffee and rubber markets will give the Republic the power to draw heavily on Europe. The monetary outlook is thus still somewhat uncertain, and though the Directors of the Bank have been able to relieve the market by reducing the official rate to 4½ per cent. on December 1st, there is little margin for unseen contingencies.

Cotton Bills of Lading.—Controversy between Europe and America on the subject of bills of lading in the cotton trade is still unsettled. The question arose out of extensive frauds in the United States last year, when an exporting firm made bogus sales of cotton to English and Continental consumers, drew bills of exchange on the buyers or the banks and accepting houses named by them, attached forged bills of lading to them, and sold the bills of exchange to American banks and exchange dealers. The bills of exchange duly came forward for acceptance and were discounted in England and Europe, but the cotton was not forthcoming. The consequent loss fell on the buyers, or, when they could not meet it, on the banks that had accepted bills on their behalf. Certain of the English and European banks stated, as the cotton importing season approached, that they would not in future accept bills of exchange drawn in the United States against cotton unless the validity of the bill of lading were guaranteed by the American house that bought the bills of exchange from the exporter. They contended that the American banks ought to be in the position to decide easily whether the bills of lading—which purport to show that stuff is actually being despatched—are valid and in order, and that it is their business to do so. The American banks took the view

that this responsibility did not lie with them, and further stated that the national banks, at least, had no legal right to give such a guarantee. A proposal put forward for the establishment of a guaranteeing company for this purpose, and the payment of premiums to it, was not heartily received by English importers, who suspected that the cost of the premiums would have to be borne by them; and a final decision has been postponed until December 31st. Perhaps the real solution of the question lies in the exercise of more care, on the part of English and Continental buyers, concerning the standing and probity of the parties from whom they get cotton.

What is a Bank?—The failure of the Charing Cross Bank, a moneylending institution which offered rates to depositors which could not be paid except by employing the funds of the concern in highly speculative risks, has led to a demand on the part of many bankers that the law should define a bank, and restrict the use of the title to companies and firms which do what is called a legitimate banking business. But it would require a good deal of ingenuity to draw a line. What is a bank? Every bank is a moneylending institution. A concern which offers 10 per cent. to depositors is suspected by everyone who knows anything about the practical facts of business. But between that and $1\frac{1}{2}$ per cent. below Bank Rate—the usual rate given by the great banks—there are many gradations. Some correspondents of newspapers who have aired their views have suggested that the publication of a balance sheet is part of the definition of a real bank. But at least one highly respected private bank does not produce a balance sheet for public inspection. And what is a balance sheet? Several of the country banks publish a document which does not give a separate statement of the cash in hand. The problem bristles with interesting queries, and Mr. Huth Jackson, in his presidential address to the Bankers' Institute, deprecated any attempt to turn Parliament loose on it.

Politics, Labour, and Stock Markets.—Stock markets have suffered from a succession of unusually severe doses of politics. The American elections were hailed with delight by Wall Street, as a knockdown blow for Rooseveltism and the policy of hostility to organised capital; but second thoughts reminded operators that the Democratic victories had been rather too sweeping, and that the hoped-for period of deadlock, in which neither party could do

anything, was accordingly less likely to make its appearance. Tariff Revision seems to be now as assured as anything American and political can be, and a spell of waiting and quiet trade is the natural consequence. But natural consequences do not always follow. In the meantime there has been an improvement in the American trade balance, but America's greed for more capital is still enormous and unsatisfied. At home we have had the breakdown of the Conference and a General Election—still, as I write, only a prospect, but a prospect which is an effective damper on business. The Stock Exchange, Tory almost to a man, hopes that the time of year chosen for the election will be bad for the Radicals, but everybody groans at the interruption to business, and the diversion of the public mind from the attractions of the stock markets. Trade, however, remains wonderfully good, in spite of many adverse circumstances, such as labour disputes, the duration and bitterness of which have given alarm to the stock-holding classes. Consols have continued on their downward course and have been below 79. The Bankers' Magazine of November contained an interesting and ingenious article by Mr. A. H. Gibson, showing that the normal price of Consols is $77\frac{1}{2}$; he arrived at this inference from the fact that the average yield of Consols for forty years before 1875 was £3 4s. 6d. per cent., whence he jumped to the conclusion that this ought to be the normal yield, and that $77\frac{1}{2}$, which returned this yield on a $2\frac{1}{2}$ per cent. stock, is the right average price. This is rather a dangerous leap, and one can only admire the audacity of an economist who can maintain that there is a normal price of anything; but the article was thoughtful and suggestive. In spite of politics and labour troubles, Home Rails have at last responded to good trade, traffics, and dividend prospects. On estimated dividends they now yield 5 per cent. and upwards. It seems to me that they ought to do all that for their holders, in view of all the uncertainties to which the transport industry is liable. Revolutions have been plentiful: in Portugal successful, in Mexico apparently suppressed, in Uruguay ditto, in Brazil only a seamen's mutiny. These affairs had wonderfully little effect on the stock markets, chiefly because they fortunately had very little sail spread.

HARTLEY WITHERS

. CURRENT TOPICS.

THE King, following the example of his August father, has been graciously pleased to become the patron of the Royal Economic Society.

THE Society is now entering on the twenty-first year of its existence; dating not from its incorporation as a Royal Society eight years ago, but from the foundation of the British Economic Association.

AMONG the topics which have been current during the last quarter, strikes have unfortunately been prominent. An interesting communication respecting the recent French railway strike has been sent to us by the Paris correspondent of the Royal Economic Society, Professor Gide. The strike, he observes, stirred up less emotion in France itself than abroad. There was no fall on the stock exchange—that faithful interpreter of public opinion. The reason is that no one believed the strike would last. Also everyone believed, paradoxical as the opinion may seem, that the strike had a worse chance of success with a semi-Socialist Government than it would have had with a Conservative one. And so it proved. The Prime Minister who in past years had commended a general strike, found himself compelled to blot out his *péché de jeunesse* by having unhesitating recourse to means of pressure.

YET it was no easy matter for the Government to act so as to be within the law, there being nothing in the laws of France forbidding railway, or other strikes, in the public services. There was, it is true, a Bill to that effect passed fifteen years ago by the Senate. But the Chamber, fearful of displeasing members of the railway service, representing no less than three to four hundred thousand electors, postponed the debate on the Bill. It went further: it passed a resolution formally recognising, not, it is true, the right of the railway services to strike, but their right to form trade unions. From that time the Government, thanks to this weakness, of which it has had cause to repent, has not dared to force their hand. Thus disarmed, it has been compelled to hunt in its archives for old laws, and has found a law dating from the start of railways, from 1845. This law punishes severely all injury to railway lines, and declares further that strikes were “not pro-

fessional, but insurrectional!" This provision against revolutionary designs afforded a loophole in the recent emergency. Recourse was also had to measures used by Italy and Hungary in similar situations. That is to say, all railway servants who still were liable as reservists to military service were summoned to serve. Thus they were compelled to perform as soldiers the duties they had refused to do as employees.

THE legality of these severe measures, according to our correspondent, is open to dispute, but public opinion willingly sanctioned them in virtue of the principle, *salus populi suprema lex*; and the more willingly because of their success. Had they failed, public opinion might have shown itself less tolerant. Now that the danger has passed, the Government will no doubt have to undergo sharp attacks from the Socialist and Radical-Socialist parties. It will doubtless lose no time in passing into law the Bill which penalises strikes in the public services.

It may be asked what part was played by the General Confederation of Labour (the famous C.G.T.) in the recent strike? Professor Gide thinks that it took no part at all, and even went out of its way to do so, foreseeing failure. The action of the C.G.T. cannot well be very efficacious in the affairs of railway servants, who are scattered over every part of the country, and of whom not more than one-fifth are unionists. It is even possible that the effect of this defeated strike may prove a considerable blow to the 'trade-union' movement. We know that in France, under the name *Syndicalisme* (trade unionism), a certain body is included who have made it their programme to repress all social mediation other than what the working classes win by themselves. Hence they repudiate not only all reforms of a philanthropic character proceeding from the propertied classes, but also all reforms obtained through Government and legislation by way of political action. In this respect they are distinguishable from Socialism properly so called, the aim of which is the conquest of political power. To take an example: Syndicalism ridicules asking for a law to limit the working-day to eight hours. It says the workers have only to stop working after the eighth hour. There is no need of legislation for that. It is what is called *direct action*. And the strike is the mode of action best adapted to the Syndicalist programme—to strike again and again till the time is ripe for the "general strike," the supreme

goal. We see clearly that Syndicalism is a pretty near relative of the old Anarchism. But there is this essential difference: Syndicalism is strictly "professional," and aims at proximate results; Anarchism is more ideological, and is not limited to the interests of the wage-earning class.

TURNING to labour movements in this country, we find that the unrest of which some signs were noticed in our September issue has become a grave reality. It has been widely spread, and a movement, even though it be but sporadic, that is being experienced by various nations may be attributable in part to common causes such as the upward movement of retail prices and the increased cost of living; the higher standard of demand; the new outlook of a new generation; ignorance: education. All these are among the causes that appear to explain the present unrest, and, incidentally, as regards trade union organisation in this country, to be leading to frequent illustrations, if not of the weakness of its present leadership, of impatient dissent from present guidance.

An important exception to this phase of the moment was, however, illustrated in the recent dispute in the cotton industry and in the speedy termination of the lock-out there. In the case of this great industry the difficulty, although appearing to turn upon the refusal of a single operative to undertake an assigned task, in reality reflected the deliberate view taken by the trade union concerned that a freedom to alter, and allocate tasks was being claimed by the employers in contravention of an accepted agreement. In the event it was admitted that a re-consideration and, possibly, a re-interpretation of certain clauses of this—the Brooklands Agreement—were reasonable. For the temporary settlement of a dispute that at one time threatened to be widespread and lasting, the industry itself and the country at large are indebted primarily to Mr. Askwith, of the Board of Trade.

In the South Wales coalfield, where grave disorder and outrage still continue (November 25th), and in the North of England and on the Clyde, where a lock-out of boilermakers in the shipbuilding trade has been in progress since September 3rd, there appear to have been the most marked instances of a breakdown of that sense of corporate responsibility and acceptance of obligations incurred that are the hall-mark of effective trade union organisation.

THE time has hardly come for passing judgment on the occurrences in either district, but as regards both centres of industrial dispute recent circumstances appear to make it more pertinent to draw attention to the harm of the sectional and unauthorised strike which has been common in both industrial fields, and to the weakness on the one hand of control and on the other of loyalty that have made those strikes possible, than to examine the circumstances in which the miners have broken away or those under which the Edinburgh Agreement, which was being contravened by sections of the boilermakers, was entered into; or, again, the joint proposals recently formulated at York, which have been rejected more than once by a ballot of the men.

THE point of moment is, not the episode of this or that agreement or proposal for adjustment, but the possibility of depending on the trade union itself, as the instrument by which the collective bargain becomes possible. In the shipbuilding trade what looks like initial weakness has led to the deplorable result that many thousands have suffered, and are suffering, from the impatience and irresponsibility of a relatively small number who, as would have happened during the secretaryship of Mr. Robert Knight, should have been punished according to rule for breaking their contract, no matter how strongly convinced they may have been of the justice of their claims. By this means, not only would that hardening of relationships that must tend to follow from the prolonged lock-out have been avoided, but the way would have been prepared for negotiations in the future upon a stronger foundation than now seems possible. For it is under conditions that make for stability and assured profits that labour is able always to make its best bargain.

THE Board of Trade chart of unemployment shows a recent movement that is in general sympathy with the main trend of the past decade. The percentage of unemployed recorded at the end of October is 4.4, and although this figure is much better than the corresponding one of a year ago it is disappointing in view of the general improvement in trade. A main explanation of the upward movement of the curve is found in the indirect dislocation of industry caused by the lock-out in the shipbuilding industry, to which reference has just been made, but the seasonal slackening in the building trades is also making itself felt.

THE 43rd Trade Union Congress was held this year at Sheffield—in September, as usual—and was attended by 496 delegates. This was almost the same number as that of last year, but the members represented, 1,639,853, showed a slight diminution of something over 12,000. In all about 20 per cent. of the total number of trade unions were represented, and some 70 per cent. of the total membership. More than a third of the membership represented at the Congress was that of the mining and quarrying group, and about half was that of this and the textile groups combined. Various resolutions were passed, for the most part on lines made familiar by preceding Congresses, but in some cases explained, either by recent developments, as by a rather hasty critical vote on the new Labour Exchanges, or by the exigencies of the moment, as in the case of a resolution passed by a large majority, calling for the restitution of the power of making the political levy withdrawn by the Osborne judgment.

THE now-famous judgment to which reference has just been made is having a widespread effect—apparently upon the constitution of the Labour Party itself, and certainly upon general politics. In the former connection the important step has been taken, *post hoc*, if not *propter hoc*, by the Labour Representation Committee of abolishing the pledge of exclusive allegiance to the Labour Party, the enforcement of which had considerable weight upon the Bench when the Osborne judgment itself was delivered. Formally, a greater freedom of action will thus be now possessed by all Labour members, but the organisation and machinery of a distinct party are necessarily unaffected.

ON the side of politics the judgment has led to the announcement by the Premier that some Bill to provide for the payment of members is contemplated by the present Ministry. Mr. Asquith has also stated that it is proposed to legalise the trade union levy for political purposes, municipal and parliamentary, provided that the opinion of the union has been “effectively ascertained,” and that there is no compulsion on any member to subscribe. It is upon the interpretation and application of these two limitations aiming at the protection of minorities that controversy is already turning.

THE Mansion House Council on the Dwellings of the Poor has agreed to join forces with the London Council of Health Societies, and the two bodies will continue their work under the title of “The Mansion House Council on Health and Housing.”

THE Mansion House Council, was founded in 1888, and for many years the Council, with its affiliated committees, undertook an unofficial inspection of the poorer houses in London, the total number of houses inspected being 200,000. Experience has now shown that the problems of improving the dwellings of the poor and of raising the standard of personal hygiene are so closely interwoven that it is best to have a single organisation to deal with both subjects.

THE Association of Municipal Corporations, at their annual meeting on October 7th, dealt with the question of the auditing of municipal accounts. The Municipal Trading Committee of 1903 urged the abandonment of the existing system of elective auditors, and the appointment of auditors who are members of the Institute of Chartered Accountants or of the Incorporated Society of Accountants and Auditors. The Association, resolved to ask the Government to bring in a Bill to deal with the subject.

A LARGELY attended Conference of Labour Organisations was held on October 7th at the Memorial Hall, Farringdon Street, to discuss the subject of destitution and unemployment. The discussion concentrated itself upon the proposals of the Minority Report of the Poor Law Commission. The Social Democratic Party moved an amendment objecting to the ideas lying behind the phrase, "the break-up of the Poor Law." The amendment was opposed by Mr. Sidney Webb and lost. The Conference finally passed a resolution supporting the proposals of the Minority Report of the Poor Law Commission, and calling upon the Government to pass a right to work Bill.

THE Town Planning Conference organised by the Royal Institute of British Architects, which was opened on October 10th at the Royal Academy by Mr. John Burns, was the most representative yet held in this country. Nearly 100 corporations and district councils appointed delegates, and the members of the Conference numbered 1,200. In connection with the Conference an exhibition was held, including more than 1,000 plans and many models illustrating the growth of cities, ancient and modern types of town planning, the development of suburbs, garden cities and villages, and the laying-out of parks and open spaces.

MR. D. J. SHACKLETON, the well-known Labour leader and promoter of the Workers' Educational Association, has been

appointed Senior Labour Adviser at the Home Office. The Home Secretary accompanies the announcement of this appointment with the explanation that "the continually widening range and growing complexity of the industrial problems with which the Home Office is called upon to deal . . . require that the Department shall be provided with a readier means than exists at present of ascertaining and focussing the feeling of workers generally on administrative and legislative questions which affect their interests" (*Times*, November 12th).

MR. H. O. MEREDITH has been appointed Professor of Economics at the Queen's University of Belfast. One of his first duties will be to organise the newly established Faculty of Commerce. Mr. Meredith was Lecturer in Economic History at the University of Manchester up to the end of the year 1908. He is well known to our readers by his "History of Protection in France" and "Outlines of Economic History" reviewed in the ECONOMIC JOURNAL by Professor Gide and Professor Clapham (vols. xv. and xix.) respectively; also by an article in which the idea of a scientific Protection of Infant Industries is examined, and by several judicial reviews.

THE University of Berlin, on the occasion of its centenary, has conferred an honorary degree on Professor W. J. Ashley. In the diploma conveying this honour, Professor Ashley is described as—among other qualifications—a most subtle critic of German literature, the author of a splendid history of British Economy, and one who has published very instructive [*bonæ frugis plenos*] books on most important problems of Economic History and Commerce.

In a recent publication, Professor Ashley has handled another important problem, the ascertainment of a change in general prices. Through the medium of a popular evening paper he renders the result of refined statistical investigations accessible to the classes that are practically most interested in a change in the cost of living. He finds the rise of prices to be a fact; and he considers that among its causes the immense increase in the supplies of gold has played a large part. "How large a part of the 18 per cent. rise is to be attributed to that one cause" he leaves an open question. As a means of adjusting wages to prices, there is recommended collective bargaining practised by a well-disciplined and business-like trade unionism. (*Evening News*, October 3-7, 10, 12.).

RECENT PERIODICALS AND NEW BOOKS

The Economic Review.

- OCTOBER, 1910. *The State and Distributive Justice.* H. M. CONACHER. *Labour in Japan.* REV. J. C. PRINGLE. Agriculture, mining, wages, the cost of living, and the fluctuation of employment are among the topics, illuminated by statistics. *Organised Charities in Oxford.* C. VIOLET BUTLER. A clear delineation of various charitable agencies, which "will at least clear the way for those who hope to improve the world, either by influencing character or by changing external conditions." *Municipal Enterprise in Germany.* R. H. TAWNFY.

The Nineteenth Century.

- SEPTEMBER, 1910. *Free Trade in its Relation to Peace and War.* RIGHT HON. EARL OF CROMER. A paper read before the International Free Trade Congress at Antwerp. *The Blight of the Land Taxes.* C. NEWTON-ROBINSON. *Poor Law Babies.* JANET LANE-CLAYPON.
- OCTOBER. *The Story of the Osborne Case.* HAROLD COX. *The Ownership of Land.* SIR GILBERT PARKER. *The Bitter Cry of the Irish Home Worker.* MARGARET H. IRWIN.
- NOVEMBER. *The French Strikes.* E. TAVERNIER. *The Theory of American Protection.* MORETON FREWEN.

The Contemporary Review.

- OCTOBER, 1910. *The Foreign Trade of Great Britain and Germany.*
- NOVEMBER. *The Osborne Judgment and Trade Unions.* J. R. MACDONALD, M.P.

The Quarterly Review.

- OCTOBER, 1910. *International Finance in Time of War.* E. CRAMMOND. Disputing Mr. Angell's views [referred to in *ECONOMIC JOURNAL*, Vol. XX., p. 274], the writer fears the strain on our credit imposed by a great war. *The Position of Trade Unions.* HAROLD COX. "It is now proposed to legalise a new system under which certain members, in return for so much a year, will sell their votes on all questions."

The Edinburgh Review.

- OCTOBER, 1910. *Our Food Supplies and Imperial Preference.* The liability to deficiency of local harvests, shown by statistics, makes it dangerous to exclude sources of food supply.

The Women's Industrial News.

OCTOBER, 1910. "*Blind Alley*" Occupations. R. H. TAWNEY. To prevent the unemployment and other evils attending such occupations, it is proposed that the half-time system should be abolished, that after a future date, say, January 1st, 1914, all children must make full-time attendance up to the age of fifteen. Young persons of both sexes are to be prohibited from working more than thirty hours per week, and must attend a Continuation School or otherwise continue their education.

Clare Market Review.

OCTOBER, 1910. *Theory and Practice in English Hop-growing.* F. C. CLEVELAND-STEPHENS. The fluctuations of the supply, and of the demand too, the (probable) combination of the brewers, the competition of the farmers, result in a gamble which defies theory. *Methods of Invalidity Insurance.* H. CLIFFORD CROOK.

The Quarterly Journal of Economics (Boston).

AUGUST, 1910. *The Mann-Elkins Act.* F. H. DIXON. The Act of 1910, amending the Act to regulate commerce, among other improvements, rehabilitates the "long and short haul clause" of the earlier Act, and empowers the Inter-State Commerce Commission to suspend prospective changes of railway rates. *Proposals for Strengthening the National Banking System.* H. O. M. W. SPRAGUE. The series of reforms proposed in this and the preceding number are well summarised by the writer, but the summary is not easily abridged. *Compulsory Arbitration in New Zealand.* J. E. LE ROSSIGNOL, W. D. STEWART. The future of the system is regarded as still uncertain. *Old Age Pension Schemes.* F. S. BALDWIN. A review of the principal types—not very favourable to the British non-contributory system—is followed by a programme of legislation for American States.

A Revised Index Number for Measuring the Rise in Prices. J. PEASE NORTON. A modified form of the "Gibson"—the successor of the "Dun"—index number shows a great general rise in American prices since 1897; a temporary fall in 1907-8, followed by a sharp rise. *Method of Taxing the Unearned Increment.* E. H. JOHNSON. An unfavourable criticism of Professor Davenport's unfavourable criticism of the land taxation in the English Budget.

Political Science Quarterly (New York).

SEPTEMBER, 1910. *Marxism v. Socialism.* V. G. SIMKHOVITCH. *Restriction of Hours of Women's Labour.* G. G. GROAT. An interpretation of American law.

The Yale Review.

NOVEMBER, 1910. *Sick and Accident Insurance in Switzerland.* O. H. JENNY. *The Railroad Rate Controversy.* A. M. SAKOLSKI. The progress of Federal Control of rates is traced; and the adoption of the "distance principle" is anticipated.

The American Academy of Political Science (Philadelphia).
NOVEMBER, 1910. This number is devoted to Banking Problems.

Journal des Économistes (Paris).

- AUGUST, 1910. *Le problème de la dépopulation.* G. DE MOLINARI. The decline of population is caused by excess of taxation, and will not be remedied by measures requiring additional taxes.
Mines. YVES GUYOT. Objections to proposed legislation.
SEPTEMBER. *Le port d'Anvers.* YVES GUYOT. *Le second Congrès du libre-échange.* A. RAFFALOVICH. *Les immobilisations de capitaux et les crises économiques.* EUGÈNE D'EICHTHAL.
OCTOBER. *L'accaparement.* G. DE MOLINARI. *L'État et l'épargne.* YVES GUYOT. *Les deux régimes.* HENRI LAMBERT. *La réforme de la loi de 1844 sur les brevets d'invention.* FERNAND JACQ.
NOVEMBER. *La grève des chemins de fer.* YVES GUYOT. *Le caoutchouc au Brésil.* A. D'ANTHOUDARD. *La révision du système douanier en Italie.* E. GISETTI. *Frère Orban, économiste et financier.* R. G. LÉVY. *L'impôt sur la plus-value du sol.* . . . M. BELLOM. A review of taxes on the increment of site-value in Germany.

Revue d'Économie Politique (Paris).

- AUGUST SEPTEMBER, 1910. *Les forestiers et le fisc.* A. DUGARÇON. *Le Mouvement des Coopératives de Crédit vers 1863.* P. MORIDE. *Théorie sur la formation de villes.* R. MAUNIER.
OCTOBER, 1910. *La monnaie en France au XVII^e et au XVIII^e Siècles.* LEVASSEUR. *La méthode du Proudhon.* G. BOUGLÉ. *Le Socialisme Municipal en France.* H. NÉZARD. *Une théorie négligée (II).* A. LANDRY. A study in Cantillon.

Revue Économique Internationale (Brussels).

- SEPTEMBER, 1910. This number deals with the modern city: the giant London, Garden Cities, the city in Germany, the "rural city" of Hungary.
OCTOBER, 1910. This number deals largely with money and finance. DR. M. DUB shows how near the Austrian policy of bills of exchange approaches to the ideal of cash payments. PROF. W. LOTZ inquires how far State aid tends towards communism.

L'Économiste Français (Paris).

- SEPTEMBER 24. *Le réclame.* RAPHAEL G. LEVY. With reference to M. Victor Mataga's recent volume, M. Levy considers the use of advertisements, their cost—said to be 100 million francs per annum in France and more than ten times as much in the United States—their influence on price, and other features.
OCTOBER 22. M. LEROY BEAULIEU sees in the "syndicalists" who organised the French railway strike not anarchists; but an anti-social federation of a piece with the Commune of 1871. The demands of the strikers could not have been satisfied without new taxes amounting to 200 million francs. The tyranny of the Syndicats is to be resisted by closing the Paris "Bourse du Travail" and dissolving the "Confédération Générale du Travail."

- NOVEMBER 19. *Le Café*. E. PAYEN. A study on the production, prices and consumption of coffee, with an account of the attempt to steady the price made by the State of São Paulo.

Bulletin de l'Institut Solway (Brussels).

The Solway Institut de Sociologie has started this year a monthly Bulletin, into which are transplanted papers from various quarters, bearing on the object of the Institut, e.g., *Ancient and Modern Imperialism* by LORD CROMER, *Indian Land Tenure* by Rev. F. W. BUSSELL. The interests of Sociology are not limited to "quicquid agunt homines." There are papers on *Intelligence in Birds*, *The Origin of Insect Societies*, and even the *Genesis of Zero*.

Jahrbücher für Nationalökonomie (Jena).

AUGUST, 1910. *Die Zukunft der Wirtschaftsgeschichte*. G. BRODRITZ. *Kartellbewegung in Russland*. J. GOLDSTEIN. *Bankreform in Amerika*. H. LIE.

SEPTEMBER. *Zur Kritik der Reichswertzuwachssteuer*. K. DIEHL. An unfavourable criticism of the Bill for imposing an Imperial tax on site-value in Germany.

OCTOBER. *Deutschland, Wirtschaftliche Zukunft in Krieg und Frieden*. A. DIX. *Gossen und seine Lehre*. R. LIEFMANN. A statement of Gossen's main doctrines, translated from the language of mathematics; in honour of the hundredth anniversary of his birth.

NOVEMBER. *Die Bankenquete und die Depositenfrage*. W. LEXIS. Referring to the inquiry which the eminent writer has described in the *ECONOMIC JOURNAL*, Vol. XX.

Jahrbuch für Gesetzgebung (Leipzig).

1910. HEFT 3. *Die neuerliche Wirtschaftstheorie in der Vereinigten Staaten*. J. SCHUMPETER. *Der Überschuss an deutschen Frauen und ihre Heiratsaussichten*. The surplus of women in Germany is not at the marriageable age, the chances of marriage are better than they seem. R. MAY. *Bismarck und die preussisch-deutsche Freihandelspolitik*. O. SCHNEIDER. *Leibnitz als Volkswirt*. A. SALZ. The views of the universal genius on mercantilist theory, demography, &c., reward attention. There are other interesting articles.

Archiv für Sozialwissenschaft (Tübingen).

SEPTEMBER, 1910. *Siedlungsfragen und Eingeborenepolitik. II.* DR. MORITZ BONN. A sequel to an article in Vol. XXVII., dealing with the relations between settlers and natives in South Africa. *Zur Dienstbotenfrage*. ELSE KESTEN-CONRAD. The result of an inquiry conducted by the aid of "Frauenvereine" in several German towns as to the condition of maidservants—their age, birthplace, wages, &c.

Zeitschrift für Volkswirtschaft (Vienna).

BAND XIX., HEFT IV. and V. This number includes a tribute to Léon Walras by DR. J. SCHUMPETER; and remarks on the shifting of taxation by PROF. WALTER LOTZ.

Giornale degli Economisti, (Rome).

AUGUST, 1910. *Tecoria della esportazione del' Capitale.* G. DEL VECCHIO. *L'entropia economica elementare.* E. SELLA. *Le importe sugl' incrementi di valore.* B. CRIZIOTTI. Taxes on the unearned increment of capital value and on that of income are considered.

SEPTEMBER. *Sul movimento dei rimpatriati dalle Americhe.* A. BENEDEUCE. *I disastri de Mezzogiorno.* L. A. CAPUTO. Remedies for the disasters caused by the Italian earthquakes are suggested. *Le imposte sugli incrementi di valore.* B. GRIZIOTTI.

La Riforma Sociale (Turin).

SEPTEMBER-OCTOBER, 1910. This number has for supplement a study on "the curve of price commodities in Italy." Index numbers dealing with exports and imports are constructed.

Rivista di Scienza (Milan).

JUNE, OCTOBER, 1910. This periodical, known also as "Scientia," has taken all knowledge for its province, and accordingly affords only a small proportion of its space for papers of economic interest. Among such may be noticed in the fourth quarter of this year, *Le Socialisme*, by PROF. E. RIGNANO (one of the editors). In the third quarter, *Star-Streams*, by A. S. EDDINGTON, deserves notice here on account of the analogy between physical problems of ascertaining a general trend in the motion of the stars relatively to the solar system, and the economic problem of ascertaining a trend in the change of the value of money relatively to commodities in general. That the physicists now recognise two star-streams suggests a possibility which may give pause to the framer of index numbers.

NEW BOOKS.

ASHLEY (PERCY). *Modern Tariff Industry*. Second edition. London: Murray. 1910. Pp. 447.

BAKER (C. A.). *Rates: Being the Revenue and Expenditure of Boroughs and Urban District Councils of ten thousand or more inhabitants (England and Wales). Analysed and compared.* London: King. 1910. Pp. 38. 2s. 6d. net.

BAESON (ROGER W.). *Business Barometers used in Forecasting Trade and Security Prices*. London: Effingham Wilson. 1910. Pp. 386.

BRUCE (SIR CHARLES). *The Broad Stone of Empire. Problems of Crown Colony Administration*. London: Macmillan. 1910. 2 vols.

[Personal experience has qualified the writer to discuss the problems which confront a Colonial Governor.]

COBDEN CLUB PUBLICATIONS. MOST (DR. OTTO). *The Problem of Unemployment in Germany*. TYSKA (DR. CARL VON). *The Policy of Dear Food Prices and Provisions in England and Germany*. London: Cassell and Co. 1910. Price one penny each.

CROZIER (J. BEATTIE). *The First Principles of Investment. Financial Review of Reviews*. Pp. 168.

[A sequel to *The Wheel of Wealth* reviewed in the *ECONOMIC JOURNAL*; dealing with the geographical distribution of capital.]

CUNNINGHAM (AUDREY). *British Credit in the Last Napoleonic War. With an Appendix containing a reprint of Des finances de l'Angleterre*, by H. Lassalle. Cambridge: University Press. 1910. Pp. 146.

GUYOT (Y.). *Socialistic Fallacies*. London: King. 1910. 6s.

HAMILTON-GRACE (R. S.). *Finance and War*. London: H. Rees. 1910. Pp. 72. 2s. 6d.

HARDIE (J. KEIR), M.P. *The Party Pledge and the Osborne Judgment*. Manchester: National Labour Press. Pp. 16.

["The party, pledge and all, independent, militant and defiant, must be legalised." . . . "No surrender!"]

HAWKINS (C. B.). *Norwich: a Social Study. With an Introduction by the Dean of Norwich*. London: Leo Warner. 1910. Pp. 326.

HIRST (F. W.). *The Capture and Destruction of Commerce at Sea, and Taxation and Armaments*. New York: Association for International Conciliation. 1910. Pp. 31.

KEITH (THEODORA). *Commercial Relations of England and Scotland, 1603-1707. With a Preface by W. Cunningham, D.D.* Cambridge: University Press. 1910. Pp. 210.

KNOWLES (G. W.). *Junior Labour Exchanges. With a Preface by S. J. CHAPMAN*. London: Sherratt. 1910. Pp. 32.

[The Labour Exchange, says Professor Chapman, can be applied to children leaving school. Expert advice at that stage, Mr. Knowles shows, might obviate much unemployment. "We may learn much from Germany without slavishly copying her system."]

LOW (A. M.). *A Study of the Origin and Growth of the American Tariff System and its Social and Economic Influence*. London: King. 1910. 3s. 6d. net.

MILNES (ALFRED). *From Gild to Factory. A First Short Course of Economic History*. Second edition, revised. London: Macdonald. 1910. Pp. 84.

PERRIS (G. H.). *Hands Across the Sea. Labour plea for international peace*. Manchester: National Labour Press. Pp. 16.

["The day of warfare is passing." . . . "A war such as in the old days gave one side supremacy or material advantage is to-day impossible." . . . "With half as

large a standing army and no navy at all Germany would be safe from attack." . . . Any time these last twenty years we had not merely a Two-power, but a Three-power standard of naval force. . . . Whereas we plead foreign rivalry, it is we ourselves who provoked and led the way in this competition." . . . "Goschen was the great plunger of his day." "Phantoms of a German Invasion" alarm us now . . . "We badly want a nationalisation of the large productive industries, so that they may be managed, not competitively for the benefit of a few magnates but co-operatively for the benefit of the whole nation."]

POWELL (ELLIS T.). *The Mechanism of the City. An Analytical Survey of the Business Activities of the City of London.* London: King. 1910. Pp. 172.

HOBSON (J. A.). *The Industrial System.* New and revised edition. London: Longmans. 1910. Pp. 338.

[The first edition was reviewed in the ECONOMIC JOURNAL.]

PRATT (E. A.). *Canals and Traders.* London: King. 1910. 2s. 6d. net.

SCOTT (W. R.). *The Constitution and Finance of English, Scottish, and Irish Joint Stock Companies to 1720.* Vol. II. *Companies for Foreign Trade, Colonization, Fishing, and Mining.* Cambridge: University Press. 1910. Pp. 504.

SMITH (JAMES C.). *Legal Tender Essays.* London: Kegan Paul. 1910. Pp. 285.

VROOMAN (CARL S.). *American Railway Problem in the Light of European Experience.* London: Frowde. Pp. 376. 6s.

WACHA (D. E.). *A Financial Chapter in the History of Bombay City.* Bombay: Commercial Press. 1910. Pp. 224.

WEBB (CLARENCE A.). *Valuation of Real Property.* Second edition, revised and enlarged. London: Lockwood. 1910. Pp. 322.

[The first edition was reviewed in the ECONOMIC JOURNAL. There is now added a chapter dealing with the new land values taxes imposed by the Finance Act and the land valuation connected therewith. A copy of "Form IV." with some suggestions as to filling it in is one of the useful additions.]

WHITWORTH (J. H.). *A Practical Guide to Form IV. and Other Forms.* London: Sherratt. 1910.

[There is comprised a summary of the duties imposed by Part I. of the Finance Act 1909-10.]

WILKINS (MRS. R.). *The Small Holdings Controversy: Tenancy v. Ownership.* London: King. 1910. Pp. 23. 2d.

WOOD (GEORGE HENRY). *The History of Wages in the Cotton Trade during the Last Hundred Years.* London: Sherratt. 1910. Pp. 162.

WOOD (SIR HENRY TRUEMAN). *Industrial England in the Middle of the Eighteenth Century.* London: Murray. 1910. Pp. 197.

CONYNGTON (T.). *The Modern Corporation: its mechanism, methods, formation, and management.* Fourth edition. New York: Ronald Press Co. 1910. Pp. 305. \$2.

[On the organization and management of business corporations.]

DAVIS (W. STEARNS). *The Influence of Wealth in Imperial Rome.* New York: Macmillan Co. 1910. Pp. 340.

[The author is Professor of Ancient History in the University of Minnesota.]

LEAVES (LUCILE). *A History of California Labour Legislation.* With an Introductory Sketch of the San Francisco Labour Move-

ment (University of California publications on Economics). Berkeley: The University Press. 1910. Two vols.

[The absence of "fraternalism so evident in European labour laws" appears to characterise the California legislation. The exclusion of Chinese is a more special feature. The author is Assistant Professor of Practical Sociology at the University of Nebraska.]

FRANKEL (LEE K.), and LAWSON (MILES M.). Working Men's Insurance in Europe. (Russel Sage Foundation.) New York: Charities Publication Committee. 1910. Pp. 477.

JENKS (J. W.). Governmental Action for Social Welfare. New York: Macmillan. 1910. Pp. xvi + 228. \$1 net.

[The Kennedy lectures for 1907-8 in the School of Philanthropy of New York.]

KELLY (E.). Twentieth Century Socialism: What It Is Not; What It Is; How It May Come. New York: Longmans. 1910. Pp. xix + 446. \$1.75 net.

McVEY (F. L.). Transportation: Some Phases of its History and Problems. Chicago: Cree Pub. Co. 1910. Pp. 411.

MYERS (G.). History of the Great American Fortunes. Vol. III. Great Fortunes from Railroads (continued). Chicago: Kerr. 1910. Pp. 413. \$1.50.

PLUNKETT (SIR H.). The Rural Life Problem of the United States: Notes of an Irish Observer. New York: Macmillan. 1910. Pp. xi + 174. \$1.25 net.

SPARGO (J.). Karl Marx: His Life and Work. New York: Huebsch. 1910. Pp. 359. \$2.50 net.

SWANSON (W. W.). The Establishment of a National Banking System. Kingston: Jackson Press. 1910. Pp. 117.

[A doctoral dissertation. The writer is Assistant Professor of Political Science at Queen's University, Kingston, Canada.]

WHITCOX (DELOS F.). Great Cities in America. New York: Macmillan Co. 1910. Pp. 426.

BESSE (PIERRE). La crise et l'évolution de l'agriculture en Angleterre de 1875 à nos jours. Essai d'Histoire Économique. Paris: F. Alcan. 1910. Pp. 390.

LESTRADE (VICOMTE COMBES DE). La Vie Internationale. (Bibliothèque d'Économie sociale.) Paris: Lecoq. 1910. Pp. 190.

[The facts (e.g., postal union, associations of servants, &c.), the law (e.g., as to marriage, naturalisation, &c.), the spirit (not federalistic, not fatal to individuality) of international life form respectively the subjects of three books.]

PASSAMA (PAUL). Formes nouvelles de concentration industrielle. Paris: Sirey. 1910. Pp. 341.

POINSARD (L.). Le Portugal inconnu. Étude de sociologie pratique. Paris: Giard. 1910. 7.50 fr.

[Conditions of Portugal, agriculture, industry, commerce, transportation, &c., are described.]

BÖTTGER (DR. HUGO). Die Industrie und der Staat. Tübingen: Mohr. 1910. Pp. 241.

DREY (DR. PAUL). Die wirtschaftlichen Grundlagen der Malkunst. Stuttgart: Cotta. 1910. Pp. 321.

[A study on the Economics of a Fine Art.]

HILDEBRAND (G.). Die Erschütterung der Industrieherrschaft und der Industriesozialismus. Jena: Fischer. 1910. Pp. 244.

MAYR, (PROF. GEORG VON). Begriff und Gliederung der Staatswissenschaften. Dritte ungewerkelte und vermehrte Auflage. Tübingen: Laupp. 1910. Pp. 182.

MEZ (DR. JOHN). Der internationale Postcheckverkehr. Tübingen: Mohr. 1910. Pp. 95.

[Referring to the recently introduced facilities of transmitting money by post between Austria, Germany, Hungary, and Switzerland.]

PHILIPPOVICH (E. v.). Die Entwicklung der wirtschafts-politischen Ideen im 19. Jahrhundert. Tübingen: Mohr. 1910. Pp. viii + 144. 1.60 m.

[Six lectures relative to industrial liberalism, the conservatives, socialism, social politics, the agrarians, the present situation, showing the evolution of economic and political theory during the 19th century.]

PHILIPPOVICH (PROF. EUGEN). Grundriss der Politischen Oekonomie. Zweiter Band. Volkswirtschaftspolitik. Erster Teil. Tübingen: Mohr. 1910. Pp. 352.

[This is the fifth edition of the first part of the second volume of a well-known comprehensive treatise. We announced last March the eighth edition of the first volume.]

WEBER (PROF. ADOLF). Der Kampf zwischen Kapital und Arbeit. Tübingen: Mohr. 1910. Pp. 579.

[A secondary title describes the work as aiming at a systematic exposition, with special regard to present German conditions.]

GRILLI (C.). La vendita edilizia nelle moderne metropoli. Rome: Unione Editrice. 1910. Pp. 151.

SEGRE (S.). Dal disavanzo alla conversione. Turin: Bocca. 1910.

